HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

Vol. II.] WEEK ENDING SATURDAY, JANUARY 4, 1862. [No. 75.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.		INS.	INS.
Mean @ 32° F.	—	30·183	30·195		30·204	29·411 (a)
Highest (Unreduced)	—	30·410	30·424		30·460	29·560
Lowest (Unreduced)	—	29·710	29·750		29·756	29·000
Range	—	0·700	0·674		0·704	0·560
Temperature.						
Adopted Mean	33·0	30·2	30·6		30·9	31·7
Range for Week	13·0	23·0	24·7		25·0	23·8
Daily Range	9·6	10·5	8·7		10·1	10·9
Maximum in Shade	37·0	43·0	43·4		46·0	40·0
Minimum in Shade	24·0	20·0	18·7		21·0	16·2
Maximum in Sun	—	41·4	—		48·0	—
Maximum in Sun: Black bulb in Vacuo	—	45·5	60·2		—	—
Minimum on Grass	—	16·0	17·2		16·5	12·2
Temperature in Ground at surface	—	31·96	30·58		—	—
Temperature 6 inches below	—	33·03	33·28		—	36·23 (b)
Temperature 12 inches below	—	34·98	36·00		—	37·87 (c)
Temperature of Evaporation	32·5	29·3	29·3		30·6	30·7
Temperature of Dew Point	31·5	26·6	25·7		29·7	28·4
Temperature of Air—Dew Point	1·5	3·6	4·9		1·2	3·3
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.		GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·10	1·71	1·63		1·92	1·81
Required to Saturate do	0·10	0·31	0·43		0·18	0·29
Weight of a cubic foot of Air	568·4	571·3	571·3		570·8	555·8
Degree of Humidity (Saturation—1,000)	0·940	0·856	0·808		0·943	0·861
	INS.	INS.	INS.		INS.	INS.
Water in a vertical column of the Atmosphere	2·45	2·01	1·92		2·28	2·16
Elastic force of Vapour	0·177	0·145	0·139		0·165	0·156
Clouds (Covered—10 Clear—0)	—	8·8	9·0		8·0	6·0
Prevailing Winds	—	E., SE.	NE., NW.		E., SE.	E., NW.
Rain	—	0·136	0·150		0·090	0·105
Days on which it fell	—	1	2		1	2
Ozonometer.						
Moffat (0—10)	—	0·00	—		0·21	0·50
Schonbein (0—10)	—	0·00	—		—	—
	INS.	INS.	INS.		INS.	INS.
Daily Evaporation	0·011	0·023	0·032		0·008	0·023
Weekly Evaporation	0·077	0·161	0·224		0·056	0·161

NO RETURN.

(a) Uncorrected by temperature. (b) Three feet below the surface. (c) Four feet below the surface.

There were 7 barometric oscillations during the week, the amount being 1·161 inches. There were 5 temperature oscillations, the amount being 41·3°.

The mean temperature of the week was 7·8° below the average of the last thirteen years, and 0·1° below the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Old Trafford.

Regarding the country districts only, the temperature was the highest at Ollerenshaw, the highest station.

The degree of humidity was the highest at Thelwall and the least at Sale.

The atmosphere appears to have been the clearest at Ollerenshaw, owing, no doubt, to the less prevalence of fog at higher elevations.

The fall of rain at the various stations in December, 1861, was as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	2·066	15
Sale	1·750	13
Thelwall	1·657	13
Ollerenshaw	2·770	19

The greatest fall appears to have occurred at the highest station and on the greater number of days.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester,
January 7, 1862.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper

During the Week ending Saturda

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childre	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Measles	..	..	2	2	4	2	10	..	..	..	..	..	2	..	
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Whooping-cough	..	..	..	..	2	2	4	..	..	2	..	..	..	3	
Croup	..	..	..	..	..	..	..	1	..	..	..	1	..	..	.
Diarrhœa	..	..	..	..	..	..	..	1	..	5	..	1	..	4	
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Continued Fever	..	..	..	2	..	..	2	5	5	..	1	1	3	2	
Erysipelas	..	..	..	..	..	..	..	..	..	..	1	..	..	1	.
Rheumatism	2	1	..	3	1	1	8	5	..	17	..	1	1	..	.
Neuralgic Affections	2	..	..	..	..	..	2	..	..	6	..	..	..	..	
Constitutional Syphilis	..	..	..	..	..	..	..	3	..	4	..	..	..	1	.
Phthisis	1	..	..	2	..	1	4	8	2	12	1	2	1	1	
Insanity	..	..	..	..	..	1	1	1	..	..	..	..	..	..	.
Bronchitis, Influenza & Catarrh	5	4	3	12	17	17	58	36	1	65	7	13	13	14	
Pleurisy and Pneumonia	3	..	..	..	..	1	4	1	..	3	1	1	..	1	.
Skin Diseases	..	..	..	..	..	..	..	6	..	6	..	..	..	2	
Dyspepsia	1	..	..	..	..	..	1	1	1	26	..	2	..	..	
Accidents and diseases not classified	8	8	7	5	5	11	44	37	41	170	5	8	15	21	.
TOTAL	22	13	12	26	29	36	138	105	50	316	16	30	35	50	1

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

January, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	..	Small-pox
..	..	..	..	..	..	..	..	..	..	2	2	Chicken-pox
3	..	..	..	1	..	..	3	..	..	1	21	Measles
..	..	..	..	..	..	2	4	..	..	..	6	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	4	..	..	1	4	3	2	..	2	1	29	Whooping-cough
..	..	..	..	..	1	..	1	..	..	..	4	Croup
2	..	3	..	..	1	1	..	..	3	2	27	Diarrhœa
..	2	..	..	..	..	..	..	..	..	..	2	Dysentery
..	4	..	2	1	2	..	3	..	2	..	35	Continued Fever
..	..	..	..	..	..	..	2	..	..	..	4	Erysipelas
2	4	3	..	2	..	1	5	..	6	1	57	Rheumatism
..	3	..	..	2	..	..	2	..	..	1	17	Neuralgic Affections
..	3	..	..	..	..	..	1	..	4	..	16	Constitutional Syphilis
..	6	..	1	..	..	..	2	..	4	..	45	Phthisis
1	..	..	..	..	..	..	..	..	..	..	3	Insanity
6	33	10	3	4	8	9	14	3	10	3	323	Bronchitis, Influenza, and Catarrah.
..	4	..	..	..	..	1	2	..	2	1	21	Pleurisy & Pneumonia.
..	6	..	..	..	..	1	1	..	..	2	27	Skin Disease.
..	10	1	1	..	1	..	1	..	5	..	52	Dyspepsia
8	31	4	1	2	2	3	35	..	26	5	465	Accidents and diseases not classified
22	110	21	8	13	19	21	78	3	64	19	1156	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,

(8) Mr. M. ROWLAND DAY,
(9) } Mr. W. J. MALLETT,
(10) } ,, W. H. HUGHES,
(11) } ,, C. H. BRADDON,
(12) }
(13) ,, H. RUNCORN,
(14) Dr. WHITEHEAD,

(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL
(18) ,, J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,

(22) Mr. H. M. WILLIAMSON.
(23) ,, W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J. V. L. WESTMACOTT.

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	1	..	1	6	..	..	5	13	10
Whooping-cough	6	10	3	1	1	1	4	..	4	2	32	20
Scarlatina	..	1	..	..	..	..	..	..	..	..	1	3
Diarrhœa	..	1	..	..	1	2	..	..	1	..	5	5½
Fever	..	†1	3	1	1	..	..	..	†1	†1	8	13½
Diseases of the Lungs	20	14	1	6	..	14	3	12	12	5	87	66
Other causes	*31	11	38	13	14	‡6	⁑21	5	20	8	167	134
TOTAL No. of DEATHS.	57	38	45	22	17	24	34	17	38	21	313	252
TOTAL No. of BIRTHS.	43	40	10	24	22	34	17	32	48	16	288	280

* 16 Inquests. † Typhus. ‡ 1 Inquest. ⁑ 3 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th October.	5 weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.	DISEASES.	4 Weeks ending 26th October.	5 Weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.
1	..	1	2	.... Small-pox	1	4	1	6
40	41	29	110	.... Chicken-pox	2	..	6	8
48	104	108	260	..... Measles	85	136	90	311
26	33	30	89	.... Scarlatina	25	15	12	52
3	10	9	22	.... Diphtheria	1	6	3	10
33	40	49	122	.. Whooping-cough ..	103	184	137	424
3	1	2	6	..... Croup	3	6	5	14
376	265	193	834	.....Diarrhœa.. ...	175	167	84	426
7	11	9	27	.... Dysentery	21	21	14	56
..	....	..	..	..... Cholera	..	..	..	..
16	19	21	56	.... Erysipelas	23	34	40	97
..	....	..	..	.. Puerperal Fever ..	..	..	..	..
8	10	11	29	..... Insanity	20	31	31	82
467	967	831	2265	Bronchitis and Catarrh	751	1282	1005	3038
13	22	27	62	..... Pleurisy	62	114	68	244
13	38	31	82	... Pneumonia				
5	3	3	11	.... Carbuncle	..	....	....	..
3468	3929	3056	10453	Accidents, and all other Diseases	3205	3557	2840	9602
4527	5493	4410	14430	..... TOTAL	4477	5557	4336	14370

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate.

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers ,Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

Vol. II.] WEEK ENDING SATURDAY, JANUARY 11, 1862. [No. 76.

Meteorological Observations, taken at Manchester and the Neighbourhood.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.		INS.	INS.
Mean @ 32° F.	29·532	29·605	29·654		29·622	28 741 (a)
Highest (Unreduced)	29·984	30·016	30·052		30·056	29·140
Lowest (Unreduced)	29·146	2 ·060	29·260		29·150	28·390
Range	0·838	0·956	0·792		0·906	0·750
Temperature.						
Adopted Mean	43·5	42·0	42·7		42·5	40·9
Range for Week	16·0	21·8	27·7		23·5	24·5
Daily Range	10·1	11·9	10·6		10·3	9·1
Maximum in Shade	49·0	50·8	54·2		53·5	51·0
Minimum in Shade	33·0	29·0	26·5		30·0	26·5
Maximum in Sun	—	51·5	—		53·8	—
Maximum in Sun: Black bulb in Vacuo	—	55·0	67·8		—	67·0
Minimum on Grass	—	25·0	22·2		21·5	22·0
Temperature in Ground at surface	—	38·88	39·51		—	—
Temperature 6 inches below	—	38·00	40·73		—	—
Temperature 12 inches below	—	37·93	38·71		—	—
Temperature of Evaporation	42·2	40·8	40·7		41·3	39·4
Temperature of Dew Point	40·6	39·1	38·3		39·9	37·5
Temperature of Air—Dew Point	2·9	2·9	4·4		2·6	3·4
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.		GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·91	2·76	2·67		2·66	2·63
Required to Saturate do	0·34	0·34	0·50		0·30	0·36
Weight of a cubic foot of Air	543·7	546·6	546·9		546·3	532·0
Degree of Humidity (Saturation—1,000)	0·896	0·906	0·850		0·904	0·880
	INS.	INS.	INS.		INS.	INS.
Water in a vertical column of the Atmosphere	3·50	3·29	3·19		3·40	3·11
Elastic force of Vapour	0·253	0·238	0·231		0·246	0·225
Clouds (Covered—10 Clear—0)	—	9·7	8·0		7·6	7·8
Prevailing Winds	—	S., SE.	SW.		SW., SE.	NW., W., SW
Rain	—	0·658	0·850		0·914	0·780
Days on which it fell	—	6	5		5	6
Ozonometer.						
Moffat (0—10)	—	2·00	—		4·36	6·66
Schonbein (0—10)	—	1·28	—		—	—
	INS.	INS.	INS.		INS.	INS.
Daily Evaporation	0·030	0·029	0·043		0·026	0·031
Weekly Evaporation	0·210	0·203	0·301		0·182	0·217

NO RETURN.

(a) Uncorrected for temperature.

There were 8 barometric oscillations during the past week, the amount being 2·660 inches. There were 5 temperature oscillations, the amount being 39·5°.

The mean temperature of the week was 4·6° above the average of the last thirteen years, and 12·5° above the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Ollerenshaw.

The degree of humidity was the highest at Old Trafford and the least at Sale.

Ozone occurred upon three days at Old Trafford, and on five at Thelwall and Ollerenshaw.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester,
January 15, 1862.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturday

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	2	2	2	3	9	..	..	..	..	..	..	..	..
Scarlatina	*1	..	..	..	..	..	1	..	..	..	..	..	1	1	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	3	..	2	..	6	11	..	..	..	..	1	1	13	6
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	1	1	..	1	1	..	4	..	..	1	..	2	..	4	1
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Continued Fever	..	..	..	2	..	4	6	6	2	2	3	1	2	7	..
Erysipelas	..	..	..	..	1	..	1	1	..	1	..	..	..	..	..
Rheumatism	..	1	..	5	2	..	8	6	2	7	1	2	1	..	.
Neuralgic Affections	..	..	..	..	..	..	..	..	..	4	..	..	..	..	
Constitutional Syphilis	..	..	..	1	..	1	2	2	..	6	1	..	..	..	.
Phthisis	1	..	..	..	1	4	6	2	..	18	..	1	3	1	.
Insanity	..	..	..	..	..	..	..	4	..	..	..	..	..	..	.
Bronchitis, Influenza & Catarrh	5	4	17	13	15	8	62	19	1	88	3	10	12	17	
Pleurisy and Pneumonia	..	..	..	..	..	..	..	4	..	..	1	..	4	..	
Skin Diseases	..	1	..	..	..	..	1	12	..	14	..	..	..	1	
Dyspepsia	..	..	..	..	1	..	1	1	..	29	1	1	2	1	
Accidents and diseases not classified	14	9	23	4	5	7	62	33	28	207	6	6	22	22	
TOTAL	22	19	42	30	28	33	174	90	33	377	16	24	48	68	2

* Malignant, fatal.

ANITARY ASSOCIATION.

d Public Institutions of Manchester and adjoining Districts,

of January, 1862.

SALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329			.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.
70,967.			.. 68,209. ..			.. 44,850 ..		21739	....	....	.....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	1	..	..	..	1	..	..	..	..	..	2	Small-pox
..	..	..	..	..	..	..	..	..	..	2	2	Chicken-pox
1	3	..	..	..	..	..	2	..	..	..	15	Measles
..	..	..	..	..	..	..	1	..	..	..	4	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	8	..	2	..	2	1	6	..	2	1	54	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	..	Croup
..	4	3	..	1	..	..	..	..	3	2	26	Diarrhœa
..	1	..	..	..	..	..	..	..	..	1	5	Dysentery
..	3	..	1	..	3	..	5	..	2	..	50	Continued Fever
..	1	..	..	..	..	..	2	..	..	..	7	Erysipelas
1	4	..	1	..	..	..	13	..	6	3	56	Rheumatism
..	2	..	1	..	..	..	3	..	3	1	15	Neuralgic Affections
1	3	..	..	..	..	..	2	..	5	..	22	Constitutional Syphilis
..	9	..	..	..	..	..	4	..	..	1	45	Phthisis
1	..	..	..	..	..	..	..	..	..	1	7	Insanity
3	45	9	2	6	7	3	17	6	13	3	337	Bronchitis, Influenza, and Catarrah.
..	1	..	1	..	..	..	3	..	2	..	19	Pleurisy & Pneumonia.
1	3	..	..	..	1	1	1	..	..	4	42	Skin Disease.
..	5	..	..	2	3	..	6	..	6	1	63	Dyspepsia
3	56	5	3	4	3	2	29	..	24	15	546	Accidents and diseases not classified
11	149	17	11	13	20	7	94	6	66	35	1317	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,
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(26) " A. F. PENNINGTON
(27) " J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	3	1	1	..	..	2	3	..	..	1	11	10
Whooping-cough	11	5	1	7	3	3	7	2	4	1	44	22
Scarlatina	..	1	..	..	..	..	..	..	..	..	1	2½
Diarrhœa	..	1	..	..	..	1	..	..	1	..	3	6
Fever	1	2	4	2	..	1	1	..	1	..	12	12½
Diseases of the Lungs	24	13	..	7	..	10	8	11	9	8	90	66
Other causes	11	*13	38	10	18	†14	17	12	12	8	153	142
TOTAL NO. OF DEATHS.	50	36	44	26	21	31	36	25	27	18	314	261
TOTAL NO. OF BIRTHS.	36	40	37	31	22	36	19	32	60	18	331	283

* 5 Inquests. † 2 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th October.	5 weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.	DISEASES.	4 Weeks ending 26th October.	5 Weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.
1	..	1	2	Small-pox	1	4	1	6
40	41	29	110	Chicken-pox	2	..	6	8
48	104	108	260	Measles	85	136	90	311
26	33	30	89	Scarlatina	25	15	12	52
3	10	9	22	Diphtheria	1	6	3	10
33	40	49	122	Whooping-cough	103	184	137	424
3	1	2	6	Croup	3	6	5	14
376	265	193	834	Diarrhœa	175	167	84	426
7	11	9	27	Dysentery	21	21	14	56
..	....	..	..	Cholera	..	..	..	..
16	19	21	56	Erysipelas	23	34	40	97
..	....	..	..	Puerperal Fever	..	..	..	..
8	10	11	29	Insanity	20	31	31	82
467	967	831	2265	Bronchitis and Catarrh	751	1282	1005	3038
13	22	27	62	Pleurisy	62	114	68	244
13	38	31	82	Pneumonia				
5	3	3	11	Carbuncle	..	....	....	..
3468	3929	3056	10453	Accidents, and all other Diseases	3205	3557	2840	9602
4527	5493	4410	14430	TOTAL	4477	5557	4336	14370

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate.

The Committee would also be glad to receive any other information respecting the Health of the several districts.

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33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers, Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, JANUARY 18, 1862. [No. 77.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.		INS.	INS.
Mean @ 32° F.	29·721	29·745	29·777		29·749	29 097
Highest (Unreduced)	29·936	29·942	30·012		29·980	29·088
Lowest (Unreduced)	29·562	29·505	29·564		29·550	28·710
Range	0·374	0·437	0·448		0·430	0·378
Temperature.						
Adopted Mean	37·8	35·6	35·5		34·9	34·0
Range for Week	17·0	18·1	19·8		17·6	24·1
Daily Range	5·0	7·1	8·3		6·2	6·6
Maximum in Shade	45·0	44·3	44·8		42·8	47·0
Minimum in Shade	28·0	26·2	25·0		25·2	22·9
Maximum in Sun	—	46·0	—		49·0	—
Maximum in Sun: Black bulb in Vacuo	—	49·2	61·0		—	67·9
Minimum on Grass	—	21·8	24·7		21·0	19·0
Temperature in Ground at surface	—	36·44	35·04		—	—
Temperature 6 inches below	—	37·40	37·63		—	—
Temperature 12 inches below	—	38·98	39·15		—	—
Temperature of Evaporation	36·2	34·7	34·0		34·2	33·1
Temperature of Dew Point	34·0	33·5	31·7		33·1	31·5
Temperature of Air—Dew Point	3·8	2·3	3·8		1·8	2·5
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.		GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·28	2·18	2·05		2·16	2·10
Required to Saturate do	0·40	0·28	0·40		0·29	0·20
Weight of a cubic foot of Air	553·7	556·5	557·4		557·6	546·3
Degree of Humidity (Saturation—1,000)	0·864	0·916	0·860		0·932	0·900
	INS.	INS.	INS.		INS.	INS.
Water in a vertical column of the Atmosphere	2·71	2·63	2·48		2·60	2·45
Elastic force of Vapour	0·196	0·190	0·179		0·188	0·177
Clouds (Covered—10 Clear—0)	—	10·0	7·1		8·7	9·8
Prevailing Winds	—	SE.	SE,SW.		SE,S.	SE,variable
Rain	—	0·616	0·490		0·523	0·415
Days on which it fell	—	4	3		2	4
Ozonometer.						
Moffat (0—10)	—	0·86	—		1·36	4·00
Schonbein (0—10)	—	0·71	—		—	—
	INS.	INS.	INS.		INS.	INS.
Daily Evaporation	0·031	0·018	0·029		0·015	0·019
Weekly Evaporation	0·217	0·126	0 203		0·105	0·133

NO RETURN.

There were 7 barometric oscillations during the past week, the amount being 1·043 inches. There were 5 temperature oscillations, the amount being 31·6°.

The mean temperature of the week was 2·4° below the average of the last thirteen years, and 2·1° above the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Ollerenshaw.

The degree of humidity was the highest at Thelwall, and the least at Sale.

Ozone occurred upon one day at Old Trafford, five at Thelwall, and seven at Ollerenshaw. The greatest quantity at the latter station occurred with a S.E. wind, and the least amounts with the N.W. and N.E. winds. The small quantity at Old Trafford appears to be owing to the prevalence of Easterly winds. At Thelwall the two days on which no ozone was found were marked by winds from the S.E.; this is remarkable, as compared with Ollerenshaw.

Old Trafford, Manchester,
January 21, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturda

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childre	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical 14
Small-pox	1	..	..	..	..	..	1	..	1	..	..	1	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	4	4	..	8	1	..	..	..	1	1	..	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	5	..	1	6	1	..	..	..	..	2	17	6
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	..	1	3	..	..	4	1	..	2	..	1	..	3	..
Dysentery	1	..	..	1	..	..	2	..	..	..	..	..	..	..	..
Continued Fever	*2	..	3	3	..	2	10	6	4	2	2	..	5	6	..
Erysipelas	..	..	..	..	..	..	..	..	..	3	1	..	..	..	..
Rheumatism	1	1	..	4	..	..	6	6	..	9	3	1	3	..	..
Neuralgic Affections	1	..	..	..	..	1	2	..	..	3	..	..	1	1	..
Constitutional Syphilis	1	..	..	1	..	..	2	2	..	10	..	1	1	1	1
Phthisis	..	..	2	1	..	4	7	2	1	22	5	2	2	1	..
Insanity	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	6	5	8	4	13	5	41	22	1	97	12	12	7	12	4
Pleurisy and Pneumonia	..	1	1	..	..	2	4	5	..	4	1	1	2	1	..
Skin Diseases	..	..	..	..	..	1	1	4	..	18	..	..	..	4	1
Dyspepsia	..	..	..	..	..	..	..	1	1	32	..	1	3	1	1
Accidents and diseases not classified	10	8	9	7	8	11	53	33	27	209	9	7	12	41	7
TOTAL	23	15	24	33	25	27	147	84	35	411	33	28	40	88	20

* 1 Typhus.

ANITARY ASSOCIATION.

d Public Institutions of Manchester and adjoining Districts,

of January, 1862.

SALFORD.			HULME.			CHORLTON.		ARDWICK					
1,329			477			646		508					Area in Statute Acres.
70,967			68,209			44,850		21739					Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.										
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.		DISEASES.
17	18	19	20	21	22	23	24	25	26	27			
..	..	..	..	..	..	..	..	..	..	..	3		Small-pox
..	..	..	..	..	..	..	..	..	..	4	4		Chicken-pox
3	5	..	..	..	..	..	†2	..	..	..	21		Measles
..	..	..	..	..	..	..	2	..	..	..	3		Scarlatina
..	..	.	..	..	..	..	..	..	..	..	..		Diphtheria
..	10	..	..	..	2	..	3	..	2	2	51		Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	..		Croup
1	3	2	..	..	1	..	2	..	..	1	22		Diarrhœa
..	..	..	..	..	..	1	..	..	..	..	3		Dysentery
..	4	..	1	..	5	..	..	..	3	..	52		Continued Fever
..	1	..	..	..	..	..	3	..	2	..	10		Erysipelas
..	7	1	1	1	..	1	2	1	6	2	54		Rheumatism
..	2	..	1	..	..	3	3	..	..	1	17		Neuralgic Affections
2	2	..	..	..	..	..	1	..	5	..	29		Constitutional Syphilis
..	9	..	..	..	..	..	3	..	..	2	57		Phthisis
..	..	..	..	1	..	..	..	..	..	2	3		Insanity
6	47	7	3	3	7	2	20	3	12	4	336		Bronchitis, Influenza, and Catarrh.
..	2	..	..	..	..	..	3	..	1	1	25		Pleurisy & Pneumonia.
15	7	..	..	..	..	1	1	..	..	2	55		Skin Disease.
..	11	..	1	..	3	..	2	..	6	2	66		Dyspepsia
8	53	4	5	5	9	4	33	2	26	4	562		Accidents and diseases not classified
35	163	14	12	10	27	12	80	6	63	27	1373		TOTAL.

† 1 case complicated with Pneumonia.

Medical Officers to whom the Association is indebted for the annexed Returns.

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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bowel.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tushp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	1	..	..	..	1	..
Measles	3	2	1	..	..	..	4	..	1	3	14	10
Whooping-cough	7	6	2	3	..	1	1	2	3	1	26	28
Scarlatina	..	..	..	2	..	..	..	1	..	..	3	2
Diarrhœa	2	..	1	1	1	..	..	..	..	..	5	4
Fever	..	..	2	..	..	1	*4	..	..	..	7	12
Diseases of the Lungs	16	11	..	15	..	13	1	3	8	4	71	70
Other causes	23	11	25	5	22	8	17	7	19	9	146	148
TOTAL NO. OF DEATHS.	51	30	31	26	23	23	28	13	31	17	273	274
TOTAL NO. OF BIRTHS.	56	34	7	20	11	29	33	38	57	13	298	299

* 2 Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

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4 Weeks ending 26th October.	5 weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.	DISEASES.	4 Weeks ending 26th October.	5 Weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.
1	..	1	2	.... Small-pox	1	4	1	6
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3	1	2	6	..... Croup	3	6	5	14
376	265	193	834	.....Diarrhœa.. ...	175	167	84	426
7	11	9	27	.... Dysentery	21	21	14	56
..	....	..	..	..... Cholera	..	..	..	..
16	19	21	56	.... Erysipelas	23	34	40	97
..	....	..	..	.. Puerperal Fever ..	..	..	..	..
8	10	11	29	..... Insanity	20	31	31	82
467	967	831	2265	Bronchitis and Catarrh	751	1282	1005	3038
13	22	27	62	..... Pleurisy	62	114	68	244
13	38	31	82	... Pneumonia				
5	3	3	11	.... Carbuncle	..	....	....	..
3468	3929	3056	10453	Accidents, and all other Diseases	3205	3557	2840	9602
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WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, JANUARY 25, 1862. [No. 78.

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Barometer.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·422	29·451	29·506	—	29·452	28·578
Highest } Unreduced	29·778	29·952	29·976	—	29·938	28·888
Lowest } Unreduced	29·114	29·103	29·160	—	29·040	29·290
Range	0·664	0·849	0·816	—	0·898	0·598
Temperature.						
Adopted Mean	36·4	35·3	34·6	34·3	35·0	31·6
Range for Week	23·0	23·0	24·3	20·3	21·8	23·4
Daily Range	8·9	11·2	13·3	7·8	9·6	7·1
Maximum in Shade	49·0	48·0	48·8	44·7	46·8	45·0
Minimum in Shade	26·0	25·0	24·5	24·4	25·0	21·6
Maximum in Sun	—	51·5	—	51·4	49·5	—
Maximum in Sun: Black bulb in Vacuo	—	55·0	70·0	—	—	—
Minimum on Grass	—	19·0	22·8	22·6	21·0	18·2
Temperature in Ground at surface	—	34·31	33·71	—	—	32·81 (a)
Temperature 6 inches below	—	34·57	35·33	—	—	34·81 (b)
Temperature 12 inches below	—	35·45	36·87	—	—	36·66 (c)
Temperature of Evaporation	34·9	34·1	33·2	33·1	33·7	30·5
Temperature of Dew Point	32·7	33·2	30·9	31·1	31·6	27·9
Temperature of Air—Dew Point	3·7	2·1	3·7	3·2	3·4	3·7
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·14	2·11	1·98	2·05	2·10	1·78
Required to Saturate do	0·40	0·33	0·38	0·27	0·30	0·32
Weight of a cubic foot of Air	549·9	551·5	553·4	553·7	551·9	539·4
Degree of Humidity (Saturation—1,000)	0·873	0·886	0·856	0·873	0·870	0·849
	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	2·57	2·71	2·39	2·41	2·46	2·10
Elastic force of Vapour	0·186	0·196	0·173	0·174	0·178	0·152
Clouds (Covered—10 Clear—0)	—	6·8	7·1	—	6·6	6·1
Prevailing Winds	—	SE.	SW, SE.	SE., SW.	E, SE.	E
Rain	—	0·173	0·280	0·300	0·353	0·545
Days on which it fell	—	2	4	3	4	4
Ozonometer.						
Moffat (0—10)	—	2·00	—	—	4·50	6·86
Schonbein (0—10)	—	1·86	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·029	0·010	0·027	0·024	0·026	0·026
Weekly Evaporation	0·203	0·070	0·189	0·168	0·182	0·182

(*a*) One foot below the surface. (*b*) Three feet below the surface. (*c*) Four feet below the surface.

There were 4 barometric oscillations during the week, the amount being 2·051 inches. There were 5 temperature oscillations during the week, the amount being 27·2°.

The mean temperature of the week was 3·5° below the average of the last thirteen years, and 5·3° below the corresponding week last year.

The mean temperature of the week was the highest at the Royal Infirmary and the lowest at Ollerenshaw.

The degree of humidity was the lowest at Ollerenshaw and the highest at Old Trafford.

Ozone occurred upon two days at Old Trafford, and upon seven each at Thelwall, and Ollerenshaw.

I have much pleasure in drawing attention to the hygrometrical valves for Bowdon, which now allows a comparison of relative humidity to be made for all the stations. Ozonometric observations have also been commenced at Bowdon, so that returns of this element will now be made at four stations out of the six. At the Royal Infirmary observations of this element are useless, as it can scarcely ever be detected there, owing to the large amount of products of combustion always present in the atmosphere.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester,
January 29, 1862.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturday

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	..	†1	..	..	..	1	1	..	..	..	..	1	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	1	1	4	2	8	..	..	..	..	..	1	..	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	7	3	..	4	14	..	..	2	..	..	..	7	6
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	1	..	..	1	1	3	1	..	..	..	..	..	1	..
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	*3	..	..	5	3	3	14	4	3	2	1	..	1	6	..
Erysipelas	..	..	1	..	..	1	2	..	..	..	..	..	..	..	..
Rheumatism	2	..	..	5	..	1	8	..	2	24	2	2	4	..	..
Neuralgic Affections	1	..	..	..	1	..	2	1	..	8	..	..	2	1	2
Constitutional Syphilis	..	..	..	..	..	..	..	2	1	13	..	1	..	..	1
Phthisis	1	..	2	4	..	..	7	3	..	34	2	3	2	1	..
Insanity	..	..	..	..	..	..	..	1	..	4	..	..	..	..	..
Bronchitis, Influenza & Catarrh	11	2	9	9	7	9	47	22	1	3	6	5	4	10	3
Pleurisy and Pneumonia	1	..	..	..	..	..	1	..	..	2	..	..	2	1	..
Skin Diseases	..	..	..	..	..	..	..	7	1	17	..	..	..	2	4
Dyspepsia	..	..	1	..	..	..	1	1	1	20	1	1	1	..	3
Accidents and diseases not classified	9	8	12	9	6	11	55	33	30	241	6	10	14	26	4
TOTAL	28	11	34	36	22	32	163	76	39	370	18	22	32	56	23

* Not vaccinated. † 1 Typhus.

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

January, 1862.

LFORD.			HULME.			CHORL-TON.	ARD-WICK					
1,329	....	....	477.	....	..	646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....	..	68,209.	..	..	44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	3	Small-pox
..	..	..	..	..	..	..	1	..	..	1	2	Chicken-pox
.	4	..	..	..	..	..	1	..	..	..	14	Measles
.	..	..	..	..	..	..	..	..	..	..	1	Scarlatina
.	..	.	..	..	..	..	..	..	..	..	..	Diphtheria
2	13	..	..	..	..	..	4	..	1	1	51	Whooping-cough
.	..	..	..	..	..	..	..	..	..	..	..	Croup
1	2	..	..	1	2	..	2	..	4	2	19	Diarrhœa
.	..	..	..	..	..	..	..	..	..	..	..	Dysentery
1	6	..	1	1	2	1	2	..	3	..	49	Continued Fever
.	..	..	..	..	..	..	1	..	..	1	4	Erysipelas
1	8	2	..	1	..	..	3	..	7	2	67	Rheumatism
.	4	..	..	1	..	..	2	..	..	..	25	Neuralgic Affections
1	3	..	..	..	..	..	1	..	5	2	31	Constitutional Syphilis
1	10	..	..	..	1	..	2	..	..	..	67	Phthisis
2	..	..	..	..	..	..	..	..	..	3	10	Insanity
9	43	8	3	4	6	3	12	1	12	3	223	Bronchitis, Influenza, and Catarral.
..	3	..	..	..	..	..	2	..	3	..	14	Pleurisy & Pneumonia.
2	3	1	..	..	1	..	1	..	..	2	42	Skin Disease.
..	9	2	..	2	..	..	1	..	5	..	48	Dyspepsia
3	31	3	2	3	8	4	41	5	27	8	567	Accidents and diseases not classified
23	139	16	6	13	20	8	76	6	67	25	1237	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,

(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, ,, W. H. HUGHES, ,, C. H. BRADDON,
(13) ,, H. RUNCORN,
(14) Dr. WHITEHEAD,

(15) Mr. W. GOLLAND,
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(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J. V. L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	3	..	1	1	..	3	1	..	..	1	10	11
Whooping-cough	11	6	5	..	..	..	2	1	3	1	29	29
Scarlatina	..	1	..	..	..	..	..	..	..	1	2	2
Diarrhœa	..	..	1	..	..	1	1	..	1	..	4	4
Fever	2	2	2	..	..	..	†2	‡2	..	..	10	11
Diseases of the Lungs	17	13	4	9	..	8	4	4	11	4	74	76
Other causes	16	14	25	4	14	*6	19	10	22	6	136	154
TOTAL No. OF DEATHS.	49	36	38	14	14	18	29	17	37	13	265	287
TOTAL No. OF BIRTHS.	34	31	23	24	16	33	27	41	60	28	317	291

* 1 Inquest. † 1 Typhus. ‡ 1 Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th October.	5 weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.	DISEASES.	4 Weeks ending 26th October.	5 Weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.
1	..	1	2	.... Small-pox	1	4	1	6
40	41	29	110	.... Chicken-pox	2	..	6	8
48	104	108	260	..... Measles	85	136	90	311
26	33	30	89	.... Scarlatina	25	15	12	52
3	10	9	22	.... Diphtheria	1	6	3	10
33	40	49	122	.. Whooping-cough ..	103	184	137	424
3	1	2	6	..... Croup	3	6	5	14
376	265	193	834	.....Diarrhœa.. ...	175	167	84	426
7	11	9	27	.... Dysentery	21	21	14	56
..	....	..	..	..... Cholera	..	..	..	..
16	19	21	56	.... Erysipelas	23	34	40	97
..	....	..	..	.. Puerperal Fever ..	..	..	..	..
8	10	11	29	..... Insanity	20	31	31	82
467	967	831	2265	Bronchitis and Catarrh	751	1282	1005	3038
13	22	27	62	..... Pleurisy	62	114	68	244
13	38	31	82	... Pneumonia				
5	3	3	11	.... Carbuncle	..	....	....	..
3468	3929	3056	10453	Accidents, and all other Diseases	3205	3557	2840	9602
4527	5493	4410	14430	..... TOTAL	4477	5557	4336	14370

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate.

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

Vol. II.] WEEK ENDING SATURDAY, FEBRUARY 1, 1862. [No. 79.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·652	29·660	29·689	—	29·682	28 808
Highest (Unreduced)	30·084	30·108	30·116	—	30·100	29·200
Lowest (Unreduced)	29·468	29·424	29·470	—	29·466	28·670
Range	0·616	0·684	0·646	—	0·634	0·530
Temperature.						
Adopted Mean	44·8	44·2	44·4	43·3	43·9	42·2
Range for Week	17·2	24·6	23·8	21·3	22·0	16·3
Daily Range	9·0	10·8	9·9	9·8	9·9	7·2
Maximum in Shade	51·0	54·6	54·0	51·3	53·0	50·0
Minimum in Shade	33·8	30·0	30·2	30·0	31·0	33·7
Maximum in Sun	—	55·5	—	58·5	56·5	—
Maximum in Sun: Black bulb in Vacuo	—	63·0	77·8	—	—	78·5
Minimum on Grass	—	22·5	26·2	26·5	27·0	26·1
Temperature in Ground at surface	—	40·44	42·10	—	—	—
Temperature 6 inches below	—	39·64	40·80	—	—	37·86
Temperature 12 inches below	—	39·34	40·71	—	—	36·43
Temperature of Evaporation	43·0	42·8	42·6	42·4	42·5	40·5
Temperature of Dew Point	41·0	41·1	40·5	41·3	40·8	38·4
Temperature of Air—Dew Point	3·8	3·1	3·9	2·0	3·1	3·8
Hygrometrical condition of the Atmosphere.						
	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·92	2·84	2·88	2·99	2·96	2·68
Required to Saturate do	0·46	0·38	0·46	0·24	0·33	0·44
Weight of a cubic foot of Air	544·2	545·1	545·4	546·6	545·9	531·9
Degree of Humidity (Saturation—1,000)	0·864	0·892	0·864	0·928	0·888	0·871
	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	3·55	3·57	3·49	3·60	3·54	3·11
Elastic force of Vapour	0·257	0·258	0·252	0·260	0·256	0·232
Clouds (Covered—10 Clear—0)	—	8·6	7·4	—	6·6	10·0
Prevailing Winds	—	SE, W.	SW, W.	S, SW.	SW.	SW, W.
Rain	—	0·693	0·800	0·460	0·627	1·190
Days on which it fell	—	5	5	5	5	5
Ozonometer.						
Moffat (0—10)	—	5·28	—	4·64	4·57	8·08
Schonbein (0—10)	—	2·28	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·029	0·032	0·041	0·020	0·033	0·037
Weekly Evaporation	0·203	0·224	0·287	0·140	0·231	0·259

There were 5 barometric oscillations during the week, the amount being 1·468 inches. There were 2 temperature oscillations during the week, the amount being 35·4°.

The temperature, at 8 a.m., on the 26th of January, was 31·0°, and progressed until the 1st of February, when the reading was 50·8°, each day during the week being warmer than the one which preceded it.

The mean temperature of the week was 7·1° above the average of the last thirteen years, and 1·8° above the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Ollerenshaw.

The greatest degree of humidity occurred at Bowdon, and the least at Sale and the Royal Infirmary.

Ozone occurred upon six days at Old Trafford and Bowdon, and upon seven at Thelwall and Ollerenshaw.

The fall of rain for January, 1862, was as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	1·896	17
Sale	2·250	18
Bowdon	2·110	—
Thelwall	2·272	16
Ollerenshaw	2·445	20

The diminished fall at Old Trafford was caused by the thunderstorm, at 3 a.m., upon the 24th, being of less violence than at the other stations.

Old Trafford, Manchester
February 4, 1862

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturday

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	2	3	1	..	6	1	..	..	..	..	1	..	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	1	..	..	1	6	8	2	..	3	..	..	..	7	6
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	1	..	1	..	2	4	2	..	1	..	..	..	3	4
Dysentery	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Continued Fever	*1	2	..	..	..	1	4	2	2	1	..	1	1	..	..
Erysipelas	1	..	1	..	..	..	2	1	..	..	1	..	..	..	..
Rheumatism	5	..	2	6	..	..	13	3	1	28	1	1	3	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	6	..	1	2	..	2
Constitutional Syphilis	..	..	1	..	..	..	1	1	..	6	..	..	..	3	1
Phthisis	1	..	2	..	..	1	4	2	..	16	1	..	2	2	..
Insanity	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	4	7	8	8	10	15	52	15	..	52	4	4	10	17	..
Pleurisy and Pneumonia	1	..	..	..	..	..	1	2	..	4	..	1	..	..	..
Skin Diseases	..	..	..	..	..	..	..	9	..	12	..	..	..	1	2
Dyspepsia	1	..	..	..	..	..	1	3	..	25	1	..	1	2	..
Accidents and diseases not classified	16	6	10	8	9	15	64	24	29	200	6	11	11	38	7
TOTAL	31	17	26	27	21	40	162	69	32	354	14	19	31	73	22

* Typhus.

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

February, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....		.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209. ..			.. 44,850 ..		21739	....	....	.....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	1	Small-pox
..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox
3	..	..	..	..	..	..	..	..	..	2	13	Measles
..	..	..	..	..	..	..	..	..	..	..	..	Scarlatina
..	..	.	..	..	..	..	..	..	..	..	..	Diphtheria
..	16	..	1	1	2	..	6	..	4	1	58	Whooping-cough
..	..	..	..	..	..	..	1	..	..	..	1	Croup
1	..	1	..	..	..	..	..	..	..	..	18	Diarrhœa
..	..	..	..	..	..	..	..	..	..	1	2	Dysentery
3	7	..	1	..	..	1	2	..	4	..	30	Continued Fever
..	..	..	..	..	..	..	1	..	2	1	8	Erysipelas
1	5	1	..	..	1	..	7	..	..	2	67	Rheumatism
..	..	..	..	1	1	1	2	..	2	1	19	Neuralgic Affections
2	2	..	..	..	..	..	2	..	5	1	24	Constitutional Syphilis
..	6	..	2	..	..	1	3	..	5	..	44	Phthisis
1	..	..	..	..	..	1	..	..	..	2	6	Insanity
5	67	6	2	3	7	9	14	3	15	4	298	Bronchitis, Influenza, and Catarrah.
..	3	..	1	..	..	..	2	..	2	1	17	Pleurisy & Pneumonia.
..	10	..	..	1	..	..	1	..	..	2	39	Skin Disease.
..	7	2	1	1	..	..	4	..	4	1	54	Dyspepsia
3	35	3	..	1	4	4	33	2	21	9	517	Accidents and diseases not classified
19	158	13	8	8	15	17	78	5	64	28	1216	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1	2	..	..	..	2	..	..	..	..	5	12
Whooping-cough	9	10	3	1	1	..	4	3	2	2	35	33
Scarlatina	..	..	..	..	..	1	..	3	..	..	4	2
Diarrhœa	1	..	..	..	1	..	..	..	1	..	3	4
Fever	3	..	2	1	..	1	†1	..	2	†1	11	9
Diseases of the Lungs	9	16	1	5	..	9	5	4	10	6	65	80
Other causes	29	5	23	5	8	*9	6	6	‡19	3	113	151
TOTAL NO. OF DEATHS.	52	33	29	12	10	22	16	16	34	12	236	291
TOTAL NO. OF BIRTHS.	46	34	15	28	24	28	40	26	61	18	320	308

* 1 Inquest. † Typhus. ‡ 1 Inquest.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th October.	5 weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.	DISEASES.	4 Weeks ending 26th October.	5 Weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.
1	..	1	2	.... Small-pox	1	4	1	6
40	41	29	110	.... Chicken-pox	2	..	6	8
48	104	108	260	..... Measles	85	136	90	311
26	33	30	89	.... Scarlatina	25	15	12	52
3	10	9	22	.... Diphtheria	1	6	3	10
33	40	49	122	.. Whooping-cough ..	103	184	137	424
3	1	2	6	..... Croup	3	6	5	14
376	265	193	834	.....Diarrhœa.. ...	175	167	84	426
7	11	9	27	.... Dysentery	21	21	14	56
..	....	..	..	..... Cholera	..	..	..	..
16	19	21	56	.... Erysipelas	23	34	40	97
..	....	..	..	.. Puerperal Fever ..	..	..	..	..
8	10	11	29	..... Insanity	20	31	31	82
467	967	831	2265	Bronchitis and Catarrh	751	1282	1005	3038
13	22	27	62	..... Pleurisy	62	114	68	244
13	38	31	82	... Pneumonia				
5	3	3	11	.... Carbuncle	..	....	....	..
3468	3929	3056	10453	Accidents, and all other Diseases	3205	3557	2840	9602
4527	5493	4410	14430	..... TOTAL	4477	5557	4336	14370

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate.

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, FEBRUARY 8, 1862. [No. 80.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, Esq.	Old Trafford, G. V. VERNON, Esq.	Sale, J. CURTIS, Esq.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, Esq.	Ollerenshaw, A. NEILD, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	30·039	30·057	30·064	—	30·089	29·143
Highest (Unreduced)	30·576	30·608	30 642	—	30·640	29·674
Lowest (Unreduced)	29·840	29·885	29·906	—	29·944	29·044
Range	0·736	0·723	0·736	—	0·696	0·630
Temperature.						
Adopted Mean	44·0	43·1	42·1	43·1	42·4	41·7
Range for Week	28·0	30·9	33·6	31·2	32·6	30·3
Daily Range	5·4	8·8	12·2	10·4	8·6	9·0
Maximum in Shade	55·0	54·9	54·3	54·0	54·6	51·1
Minimum in Shade	27·0	24·0	20·7	22·8	22·0	20·8
Maximum in Sun	—	55·5	—	64·0	57·2	—
Maximum in Sun: Black bulb in Vacuo	—	59·5	67·8	—	—	61·0
Minimum on Grass	—	20·0	16·0	23·2	12·0	19·6
Temperature in Ground at surface	—	42·49	42·11	—	—	—
Temperature 6 inches below	—	42·71	43·80	—	—	41·38
Temperature 12 inches below	—	43·36	44·47	—	—	42·03
Temperature of Evaporation	42·5	42·2	40·8	42·5	41·5	40·6
Temperature of Dew Point	40·7	41·1	39·2	41·8	40·4	39·2
Temperature of Air—Dew Point	3·3	2·0	2·9	1·3	2·0	2·5
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·90	2·95	2·75	3·04	2·91	2·45
Required to Saturate do	0·40	0·26	0·36	0·17	0·23	0·26
Weight of a cubic foot of Air	552·3	553·6	555·2	553·7	554·5	538·4
Degree of Humidity (Saturation—1,000)	0·880	0·928	0·899	0·952	0·928	0·919
	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	3·51	3·57	3·31	3·66	3·47	3·31
Elastic force of Vapour	0·254	0·258	0·239	0·265	0·251	0·239
Clouds (Covered—10 Clear—0)	—	8·8	5·0	—	6·0	8·2
Prevailing Winds	—	S., SW.	NW, SE, SW	SW., NE.	SW, W, NE	W., E.
Rain	—	0·434	0·060	0·240	0·066	0·590
Days on which it fell	—	5	2	4	3	5
Ozonometer.						
Moffat (0—10)	—	1·14	—	2·57	3·14	4·43
Schonbein (0—10)	—	0·14	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·034	0·020	0·029	0·013	0·020	0·025
Weekly Evaporation	0·238	0·140	0 203	0·091	0·140	0·175

There were 5 barometric oscillations during the week, the amount being 1·080 inches. There were 3 temperature oscillations during t e week, the amount being 30·8°.

The mean temperature of the week was 4·0° above the average of the last thirteen years, and 1·1° above the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Ollerenshaw.

The degree of humidity was the highest at Bowdon, and the lowest at the Royal Infirmary.

Ozone occurred upon three days at Old Trafford, four days at Bowdon, six days at Thelwall, and seven days at Ollerenshaw.

The first four days of the week were warm, and above the average temperature; the last three days were cold, and below the average. The fall of temperature, at 8 a.m., between the 5th and 8th, amounted to 25·4°.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester
February 11, 1862

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturday

	MANCHESTER.															
Area in Statute Acres	..... Manchester Township 1,645															
Population in 1861	..... „ „ 185,050															
	Poor Law Districts.							Public Institutions.								
									Royal Infirmary.					Children		
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital	
	1	2	3	4	5	6		7	8	9	10	11	12	13	14	
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Measles	..	..	..	2	..	1	3	7	..	..	..	..	..	..	1	
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Whooping-cough	..	..	..	1	..	1	2	2	..	4	..	..	1	12	1	
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diarrhœa.....	1	1	..	1	2	2	7	1	..	6	..	1	..	3	2	
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Continued Fever.....	*2	..	..	1	1	1	5	3	4	..	1	1	4	3	1	
Erysipelas	..	..	1	..	..	..	1	..	..	..	1	..	1	..	..	
Rheumatism	2	1	2	6	..	..	11	2	1	20	1	3	3	1	..	
Neuralgic Affections	..	..	..	..	..	..	..	..	..	7	..	..	1	1	..	
Constitutional Syphilis	..	..	..	1	..	..	1	..	..	5	..	1	..	1		
Phthisis	..	..	..	1	1	..	2	5	..	14	3	1	..	2		
Insanity	1	1	..	1	..	..	3	2	..	..	..	..	..	..	.	
Bronchitis, Influenza & Catarrh	2	7	9	8	6	4	36	12	1	70	5	4	5	12		
Pleurisy and Pneumonia....	..	..	..	..	..	..	..	2	..	1	..	1	3	2		
Skin Diseases.....	1	..	..	..	..	..	1	8	1	13	..	..	1	3		
Dyspepsia	..	1	..	..	..	2	3	2	..	24	..	..	..	3	.	
Accidents and diseases not classified.....	10	7	9	7	9	13	55	37	39	212	9	15	6	49		
TOTAL	19	18	21	29	19	24	130	83	46	376	20	27	26	92	2	

* 1 Typhus.

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

February, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....		.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209. ..			.. 44,850 ..		21739	....	....	.....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	1	Small-pox
1	..	..	..	..	..	..	..	..	..	1	2	Chicken-pox
4	4	..	..	..	..	..	..	..	..	1	20	Measles
..	..	..	..	..	..	..	..	..	..	..	..	Scarlatina
..	..	.	..	..	..	..	..	..	..	..	..	Diphtheria
..	5	..	..	1	..	..	4	3	6	1	42	Whooping-cough
..	..	..	..	..	..	..	2	..	..	..	2	Croup
1	1	1	..	..	..	..	2	..	2	1	30	Diarrhœa
..	2	..	..	..	..	..	..	..	..	2	5	Dysentery
1	3	..	..	2	..	..	2	..	3	1	34	Continued Fever
..	..	..	..	..	..	..	1	..	..	1	5	Erysipelas
..	2	1	..	..	..	..	5	1	4	2	61	Rheumatism
..	..	..	..	..	..	1	1	..	2	1	15	Neuralgic Affections
..	..	..	..	..	..	1	2	..	4	1	20	Constitutional Syphilis
..	4	..	2	1	..	..	3	..	4	1	44	Phthisis
4	..	..	..	..	..	..	..	1	..	2	12	Insanity
5	30	3	3	3	11	5	13	2	17	4	255	Bronchitis, Influenza, and Catarrah.
..	2	1	1	..	..	..	3	..	3	1	21	Pleurisy & Pneumonia.
1	2	..	1	..	..	..	3	..	3	6	46	Skin Disease.
..	5	2	4	2	1	..	2	..	8	1	58	Dyspepsia
8	81	6	1	4	8	3	30	3	20	3	605	Accidents and diseases not classified
25	141	14	12	13	20	10	73	10	76	30	1278	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) Mr. W. J. MALLETT,
(10) ,, W. H. HUGHES,
(11) ,, C. H. BRADDON,
(12) ,, H. RUNCORN,
(13) Dr. WHITEHEAD,
(14) Mr. W. GOLLAND,
(15) ,, J. TEALE,
(16) ,, T. F. BROWNBILL
(17) ,, J. O. BRADBURY,
(18) ,, W. B. STOTT,
(19) ,, T. G. RICHMOND,
(20) Dr. ALEX. WILSON,
(21) Mr. H. M. WILLIAMSON.
(22) ,, W. B. MIDWOOD,
(23) ,, JOHN RAYNER,
(24) ,, J. M. KIRKMAN.
(25) ,, A. F. PENNINGTON
(26) ,, J.V.L. WESTMACOTT
(27)

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	1	..	..	..	..	1	..
Measles	..	..	..	1	..	1	..	1	..	..	3	10
Whooping-cough	12	3	..	4	1	1	1	3	6	1	32	33½
Scarlatina	1	1	1	..	..	..	..	..	..	2	5	2½
Diarrhœa	1	..	..	..	..	1	1	1	..	..	4	4
Fever	7	..	1	2	..	1	†2	2	‡3	..	18	10
Diseases of the Lungs	17	12	3	6	..	9	2	10	14	3	76	75
Other causes	15	12	28	7	15	*8	13	7	15	7	127	137
TOTAL NO. OF DEATHS.	53	28	33	20	16	22	19	24	38	13	266	272
TOTAL NO. OF BIRTHS.	41	34	13	22	21	29	30	33	50	18	291	316

* 2 Inquests. † 1 Typhus. ‡ 1 Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th October.	5 weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.	DISEASES.	4 Weeks ending 26th October.	5 Weeks ending 30th November.	4 Weeks ending 28th December.	TOTAL.
1	..	1	2	.... Small-pox	1	4	1	6
40	41	29	110	.... Chicken-pox	2	..	6	8
48	104	108	260	..... Measles	85	136	90	311
26	33	30	89	.... Scarlatina	25	15	12	52
3	10	9	22	.... Diphtheria	1	6	3	10
33	40	49	122	.. Whooping-cough ..	103	184	137	424
3	1	2	6	..... Croup	3	6	5	14
376	265	193	834	.....Diarrhœa.. ...	175	167	84	426
7	11	9	27	.... Dysentery	21	21	14	56
..	....	..	..	..... Cholera	..	..	..	..
16	19	21	56	.... Erysipelas	23	34	40	97
..	....	..	..	.. Puerperal Fever ..	..	..	..	..
8	10	11	29	..... Insanity	20	31	31	82
467	967	831	2265	Bronchitis and Catarrh	751	1282	1005	3038
13	22	27	62	..... Pleurisy	62	114	68	244
13	38	31	82	... Pneumonia				
5	3	3	11	.... Carbuncle	..	....	....	..
3468	3929	3056	10453	Accidents, and all other Diseases	3205	3557	2840	9602
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HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, FEBRUARY 15, 1862. [No. 81.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, Esq.	Old Trafford, G. V. VERNON, Esq.	Sale, J. CURTIS, Esq.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, Esq.	Ollerenshaw, A. NEILD, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	30·166	30·161	30·197	—	30·189	29 293
Highest (Unreduced)	30·592	30·604	30 626	—	30·642	29·702
Lowest (Unreduced)	30·022	30·014	30·064	—	30·034	29·160
Range	0·570	0·590	0·562	—	0·608	0·542
Temperature.						
Adopted Mean	37·5	35·1	34·5	34·7	35·2	33·3
Range for Week	23·0	27·2	28·5	26·0	25·5	20·7
Daily Range	9·3	13·0	13·3	10·3	11·3	7·3
Maximum in Shade	47·0	46·0	45·7	45·0	45·5	41·2
Minimum in Shade	24·0	18·8	17·2	19·0	20·0	20 5
Maximum in Sun	—	49·7	—	53·0	48·8	—
Maximum in Sun: Black bulb in Vacuo	—	53·2	63·3	—	—	70·1
Minimum on Grass	—	16·0	14·8	21·9	11·2	18·0
Temperature in Ground at surface	—	34·88	33·50	—	—	—
Temperature 6 inches below	—	35·44	35·90	—	—	33·17
Temperature 12 inches below	—	36·75	37·35	—	—	34·97
Temperature of Evaporation	35·9	34·3	33·2	34·1	34·6	32·1
Temperature of Dew Point	33·7	34·0	31·1	33·2	33·7	29·9
Temperature of Air—Dew Point	3·8	1·1	3·4	1·5	1·5	3·4
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·23	2·18	2·00	2·16	2·26	1·95
Required to Saturate do	0·42	0·23	0·35	0·21	0·16	0·26
Weight of a cubic foot of Air	562·3	565·2	564·9	566·1	565·4	550·9
Degree of Humidity (Saturation—1,000)	0·867	0·922	0·865	0·940	0·942	0·863
	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	2·67	2·71	2·41	2·61	2·67	2·30
Elastic force of Vapour	0·193	0·196	0·174	0·189	0·193	0·166
Clouds (Covered—10 Clear—0)	—	9·2	7·8	—	8·2	8·0
Prevailing Winds	—	NE.	NE,SE.	NW,N,NE	NW,NE.	N,NE.
Rain	—	0·022	0·030	0·040	0·040	0·000
Days on which it fell	—	1	1	1	1	0
Ozonometer.						
Moffat (0—10)	—	0·00	—	0·00	0·14	0·71
Schonbein (0—10)	—	0·00	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·032	0·008	0·025	0·012	0·012	0·024
Weekly Evaporation	0·224	0·056	0 175	0·084	0·084	0·168

There were 3 barometric oscillations during the week, the amount being 0·754 inches. There were 5 temperature oscillations, the amount being 28·1°.

The mean temperature of the week was 1·9° below the average of the last thirteen years, and 1·1° above the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Ollerenshaw.

The degree of humidity was the highest at Thelwall, and the least at Ollerenshaw.

Ozone occurred upon one day at Thelwall, and three days at Ollerenshaw; none was found at the other two stations; this has been mainly owing to the prevalence of easterly winds.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester
February 18, 1862

MANCHESTER AND SAI

New Cases of Disease coming under Treatment in Pauper

During the Week ending Saturda

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... " " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childri	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	2	..	3	2	7	1	..	..	..	..	..	2	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Whooping-cough	..	..	2	1	..	1	4	..	..	2	..	..	..	9	4
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diarrhœa	..	1	..	..	1	..	2	2	..	..	..	1	1	5	3
Dysentery	..	..	..	1	..	..	1	..	..	1	..	..	..	1	..
Continued Fever	..	..	2	1	1	2	6	3	4	2	..	2	4	6	1
Erysipelas	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..
Rheumatism	1	..	2	2	..	1	6	8	1	12	2	2	3	2	..
Neuralgic Affections	..	..	..	2	..	..	2	..	..	8	..	..	1	..	1
Constitutional Syphilis	..	..	..	..	..	..	..	3	..	7	..	..	1	..	1
Phthisis	2	..	..	3	..	7	12	3	..	21	..	2	..	3	1
Insanity	..	..	..	..	..	..	..	3	..	3	..	..	..	..	..
Bronchitis, Influenza & Catarrh	4	..	13	8	7	8	40	16	2	73	..	7	12	13	3
Pleurisy and Pneumonia	4	..	..	..	..	1	5	4	1	1	1	1	1	2	1
Skin Diseases	..	..	..	..	..	..	..	6	..	8	..	..	..	4	2
Dyspepsia	1	..	..	..	..	..	1	..	2	25	1	2	..	1	3
Accidents and diseases not classified	10	5	10	7	6	11	49	43	36	182	18	7	15	41	2
TOTAL	22	6	31	25	18	33	135	92	46	345	23	24	38	93	21

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

February, 1862.

LFORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....	....	477.	....	..	646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....	..	68,209.	..	..	44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	..	Small-pox
..	..	..	..	..	..	..	..	..	..	2	2	Chicken-pox
5	7	..	..	..	..	..	2	1	..	..	27	Measles
..	1	..	..	..	..	..	..	..	..	..	2	Scarlatina
.	..	..	..	..	..	..	..	..	..	..	2	Diphtheria
.	6	..	..	..	1	..	5	..	5	2	39	Whooping-cough
.	..	..	..	..	..	..	1	..	..	..	2	Croup
1	2	..	..	..	..	..	..	..	2	1	23	Diarrhœa
.	..	..	1	..	..	..	..	..	..	1	5	Dysentery
2	6	..	2	2	..	..	3	..	3	1	48	Continued Fever
.	1	..	..	..	..	..	..	..	..	1	4	Erysipelas
.	4	1	..	..	1	1	5	1	5	1	58	Rheumatism
.	2	..	1	..	..	..	1	..	1	1	18	Neuralgic Affections
.	5	..	..	..	..	1	2	..	4	1	26	Constitutional Syphilis
1	7	..	1	1	..	..	3	..	..	1	57	Phthisis
4	1	..	..	..	..	..	..	..	..	..	12	Insanity
2	43	9	2	1	12	3	13	1	20	4	283	Bronchitis, Influenza, and Catarrah.
1	..	..	..	..	..	1	3	..	2	4	28	Pleurisy & Pneumonia.
1	9	..	..	2	..	..	2	..	3	3	40	Skin Disease.
.	7	..	1	..	1	..	3	..	9	1	58	Dyspepsia
9	49	2	3	6	4	2	23	3	20	5	531	Accidents and diseases not classified
6	150	12	11	12	19	8	66	6	74	29	1265	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
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(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	1	..	..	..	..	..	..	..	..	1	½
Measles	..	..	..	..	..	..	..	..	..	..	..	8
Whooping-cough	8	4	4	3	..	..	7	..	..	1	27	30½
Scarlatina	..	1	..	..	..	..	..	..	..	1	2	3½
Diarrhœa	..	..	1	..	1	1	..	..	1	1	5	4
Fever	3	1	3	..	3	3	..	1	..	‡1	15	11½
Diseases of the Lungs	11	10	3	7	..	8	2	9	1	7	58	71
Other causes	11	11	23	12	16	*11	18	†9	24	¶7	142	130
TOTAL NO. OF DEATHS.	33	28	34	22	20	23	27	19	26	18	250	259
TOTAL NO. OF BIRTHS.	41	42	18	14	26	28	12	38	44	19	282	306

* 2 Inquests. † 1 Inquest. ‡ Typhus. ¶ 4 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 30th November.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	TOTAL.	DISEASES.	5 Weeks ending 30th November.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	TOTAL.
..	1	1	2	.... Small-pox	4	1	9	14
41	29	22	92	.... Chicken-pox	..	6	10	16
104	108	73	285	..... Measles	136	90	84	310
33	30	22	85	.... Scarlatina	15	12	14	41
10	9	12	31	.... Diphtheria	6	3	..	9
40	49	53	142	.. Whooping-cough ..	184	137	243	564
1	2	2	5	..... Croup	6	5	5	16
265	193	228	686	.....Diarrhœa.. ...	167	84	112	363
11	9	6	26	.... Dysentery	21	14	12	47
....	..	..	..	..... Cholera	..	..	..	..
19	21	21	61	.... Erysipelas	34	40	33	107
....	..	..	..	.. Puerperal Fever ..	..	..	..	..
10	11	10	31	..... Insanity ...	31	31	29	91
967	831	1252	3050	Bronchitis and Catarrh	1282	1005	1517	3804
22	27	21	70	..... Pleurisy	114	68	96	278
38	31	44	113	.. Pneumonia				
3	3	9	15	.... Carbuncle	....	....	..	..
3929	3056	4005	10990	Accidents, and all other Diseases	3557	2840	3618	10015
5493	4410	5781	15684	..... TOTAL	5557	4336	5782	15675

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, FEBRUARY 22, 1862. [No. 82.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	NO RETURNS.	INS.	INS.
Mean @ 32° F.	29·478	29·498	29·543		29·497	28·646
Highest (Unreduced)	29·894	29·913	29·936		29·926	29·042
Lowest (Unreduced)	29·180	29·191	29·234		29·206	28·362
Range	0·714	0·722	0·702		0·720	0·680
Temperature.						
Adopted Mean	44·1	44·0	43·6		43·8	39·5
Range for Week	21·0	22·8	23·8		23·5	19·9
Daily Range	11·0	12·3	11·1		10·6	7·3
Maximum in Shade	54·0	55·3	55·8		55·3	51·0
Minimum in Shade	33·0	32·5	32·0		31·8	31·1
Maximum in Sun	—	62·0	—		59·2	—
Maximum in Sun: Black bulb in Vacuo	—	76·8	80·8		—	80·6
Minimum on Grass	—	27·0	30·2		26·5	29·6
Temperature in Ground at surface	—	40·48	41·25		—	—
Temperature 6 inches below	—	40·12	40·94		—	37·24
Temperature 12 inches below	—	40·28	41·18		—	37·78
Temperature of Evaporation	42·2	42·4	41·7		42·4	38·6
Temperature of Dew Point	39·9	40·5	39·5		40·7	37·4
Temperature of Air—Dew Point	4·2	3·5	4·1		3·1	2·1
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.		GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·83	2·88	2·78		2·94	2·63
Required to Saturate do	0·48	0·42	0·48		0·34	0·22
Weight of a cubic foot of Air	542·0	542·4	543·8		542·6	532·3
Degree of Humidity (Saturation—1,000)	0·850	0·872	0·854		0·888	0·928
	INS.	INS.	INS.		INS.	INS.
Water in a vertical column of the Atmosphere	3·40	3·48	3·35		3·51	3·10
Elastic force of Vapour	0·246	0·252	0·242		0·254	0·224
Clouds (Covered—10 Clear—0)	—	9·6	7·7		8·6	9·8
Prevailing Winds	—	E.	SE, SW.		E, SE, S.	E, S, SE.
Rain	—	0·120	0·170		0·283	0·180
Days on which it fell	—	3	3		3	3
Ozonometer.						
Moffat (0—10)	—	4·14	—		5·57	3·78
Schonbein (0—10)	—	1·86	—		—	—
	INS.	INS.	INS.		INS.	INS.
Daily Evaporation	0·043	0·036	0·042		0·032	0·018
Weekly Evaporation	0·301	0·252	0 294		0·224	0·126

There were 6 barometric oscillations during the week, the amount being 2·263 inches. There were 4 temperature oscillations, the amount being 29·5°.

The mean temperature of the week was 5·9° above the average of the last thirteen years, and 0·4° below the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Ollerenshaw.

The degree of humidity was the highest at Ollerenshaw and the lowest at the Royal Infirmary.

The mean temperature at the Royal Infirmary, during the past week, was equal to the mean temperature at the early part of April; whilst at Ollerenshaw, during the past week, the mean temperature was equal to that of the early part of March, this shows that the difference in the mean temperature at the two stations would be well represented by an interval of a month.

Ozone occurred upon five days at Old Trafford, and seven each at Thelwall and Ollerenshaw.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester
February 26, 1862

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturday

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	1	..	..	..	..	1	1	..	..	..	3	..	1	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	2	4	3	..	9	..	..	6	..	1	..	9	2
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diarrhœa	..	..	..	..	..	4	4	1	..	..	..	..	1	2	1
Dysentery	..	..	..	..	..	..	..	1	..	..	..	..	..	2	2
Continued Fever	1	..	..	2	..	6	9	4	1	..	..	2	1	4	..
Erysipelas	1	..	..	..	..	..	1	..	..	11	..	..	..	..	..
Rheumatism	2	1	2	3	2	..	10	4	3	7	..	2	2	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	6	..	..	2	2	3
Constitutional Syphilis	..	..	2	..	..	..	2	2	..	11	3	..	..	1	..
Phthisis	..	..	..	..	1	3	4	5	..	24	1	3	3	2	..
Insanity	..	..	..	..	..	..	..	5	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	..	2	11	8	15	8	44	15	..	76	8	5	7	18	6
Pleurisy and Pneumonia	1	1	..	..	..	..	2	3	..	1	..	1	3	..	1
Skin Diseases	1	..	1	..	..	..	2	7	1	9	1	..	..	12	2
Dyspepsia	..	..	..	..	..	2	2	4	..	26	..	1	..	2	..
Accidents and diseases not classified	12	10	14	6	9	14	65	22	33	218	4	4	5	44	6
TOTAL	18	15	32	23	30	37	155	74	38	395	17	22	24	101	23

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

February, 1862.

LFORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
0,967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC NSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
.	1	..	..	..	..	..	..	..	..	..	1	Small-pox
.	..	..	..	..	..	..	..	..	..	1	1	Chicken-pox
.	1	..	..	..	..	..	..	..	..	..	7	Measles
.	..	..	..	..	..	..	..	..	..	..	1	Scarlatina
.	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
.	..	..	..	..	..	..	..	..	5	2	34	Whooping-cough
.	..	..	..	..	..	..	..	..	..	..	1	Croup
.	..	..	..	1	1	..	..	..	2	..	15	Diarrhœa
.	..	..	..	..	..	1	..	..	..	..	6	Dysentery
1	6	..	1	..	..	2	4	..	3	..	40	Continued Fever
1	..	..	..	..	..	..	..	..	..	1	14	Erysipelas
.	2	1	..	1	..	..	2	2	6	2	44	Rheumatism
.	..	..	..	..	..	..	2	..	2	2	19	Neuralgic Affections
.	..	..	..	..	..	..	1	..	3	1	25	Constitutional Syphilis
.	4	..	1	..	..	1	2	1	..	2	53	Phthisis
.	..	..	..	..	..	1	1	..	..	2	10	Insanity
6	34	6	3	3	8	4	15	7	15	4	293	Bronchitis, Influenza, and Catarral.
.	5	..	2	2	..	1	..	..	3	2	26	Pleurisy & Pneumonia.
.	5	2	1	..	..	..	6	..	3	3	55	Skin Disease.
.	7	2	..	3	1	..	3	..	7	1	65	Dyspepsia
4	89	2	3	3	4	5	40	..	22	6	581	Accidents and diseases not classified
2	154	13	11	13	14	15	76	10	71	29	1291	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bowel.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	½
Measles	1	2	..	..	..	1	2	..	1	..	7	4½
Whooping-cough	6	3	4	2	1	3	..	1	..	3	23	30½
Scarlatina	..	..	..	..	..	..	..	2	.	..	2	3
Diarrhœa	2	2	1	..	..	..	1	..	2	..	8	4
Fever	1	2	1	2	..	1	1	†1	..	..	9	13½
Diseases of the Lungs	18	7	1	13	..	6	10	10	1	7	73	68
Other causes	17	15	37	7	10	*10	15	5	39	7	162	129
TOTAL NO. OF DEATHS.	45	31	44	24	11	21	29	19	43	17	284	254
TOTAL NO. OF BIRTHS.	49	40	14	19	14	37	21	35	45	19	293	302

* 1 Inquest. † Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson,*
Population in 1861, 161,680.

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5 weeks ending 30th November.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	TOTAL.	DISEASES.	5 Weeks ending 30th November.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	TOTAL.
..	1	1	2	.... Small-pox	4	1	9	14
41	29	22	92	.... Chicken-pox	..	6	10	16
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....	..	..	..	..... Cholera	..	..	..	..
19	21	21	61	.... Erysipelas	34	40	33	107
....	..	..	..	.. Puerperal Fever ..	..	..	..	..
10	11	10	31	..... Insanity	31	31	29	91
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HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

Vol. II.] WEEK ENDING SATURDAY, MARCH 1, 1862. [No. 83.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	30·101	30·102	30·124	—	30·121	29·220
Highest (Unreduced)	30·366	30·366	30·400	—	30·420	29·472
Lowest (Unreduced)	30·030	29·802	29·864	—	29·884	29·132
Range	0·336	0·564	0·536	—	0·536	0·340
Temperature.						
Adopted Mean	40·4	40·1	39·7	39·2	39·0	36·0
Range for Week	14·0	21·6	24·0	21·8	21·1	18·3
Daily Range	5·7	7·1	9·3	7·7	5·8	6·1
Maximum in Shade	48·0	56·6	56·0	54·0	53·3	49·0
Minimum in Shade	34·0	35·0	32·0	32·2	32·2	30·7
Maximum in Sun	—	62·8	—	67·5	58·5	—
Maximum in Sun: Black bulb in Vacuo	—	67·3	77·5	—	—	66·6
Minimum on Grass	—	30·8	27·5	29·0	23·0	27·1
Temperature in Ground at surface	—	38·97	37·85	—	—	—
Temperature 6 inches below	—	39·64	39·44	—	—	34·44
Temperature 12 inches below	—	40·86	41·58	—	—	37·76
Temperature of Evaporation	38·1	37·8	37·1	37·7	37·2	34·6
Temperature of Dew Point	35·2	34·8	33·7	35·8	34·9	32·5
Temperature of Air—Dew Point	5·2	5·3	6·0	3·4	4·1	3·5
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·38	2·35	2·25	2·42	2·34	2·12
Required to Saturate do	0·56	0·56	0·62	0·40	0·46	0·38
Weight of a cubic foot of Air	557·8	558·3	559·1	559·6	559·7	546·6
Degree of Humidity (Saturation—1,000)	0·820	0·818	0·792	0·880	0·856	0·874
	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	2·84	2·79	2·68	2·90	2·81	2·54
Elastic force of Vapour	0·205	0·202	0·193	0·210	0·203	0·184
Clouds (Covered—10 Clear—0)	—	8·1	7·8	—	9·1	8·9
Prevailing Winds	—	NE.	SE,NE.	E,NE.	E,NE.	SE.
Rain	—	0·000	0·010	0·000	0·000	0·040
Days on which it fell	—	0	1	0	0	2
Ozonometer.						
Moffat (0—10)	—	0·00	—	2·07	4·50	7·36
Schonbein (0—10)	—	0·00	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·046	0·046	0·051	0·029	0·035	0·028
Weekly Evaporation	0·322	0·322	0·357	0·203	0·245	0·196

There were 6 barometric oscillations during the week, the amount being 1·261 inches. There were 3 temperature oscillations, the amount being 7·4°.

The mean temperature of the week was 0·1° above the average of the last thirteen years, and 0·8° above the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Ollerenshaw.

The degree of humidity was the highest at Bowdon and the lowest at Sale.

Ozone was not found upon any day during the week at Old Trafford, but was found upon five days at Bowdon, six days at Thelwall, and seven days at Ollerenshaw.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester
March 5, 1862

MANCHESTER AND SALF

New Cases of Disease coming under Treatment in Pauper, C

During the Week ending Saturda

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	„ „ 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	1	..	..	..	..	1	..	..	..	..	1	..	1	1
Scarlatina	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	1	2	1	1	..	5	..	..	..	..	..	..	7	2
Croup	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Diarrhœa	..	1	..	..	..	1	2	..	..	3	..	..	2	5	3
Dysentery	1	..	..	..	..	..	1	1	..	..	..	..	..	1	..
Continued Fever	1	1	..	3	..	4	9	5	1	1	1	4	3	3	..
Erysipelas	..	..	..	..	..	..	..	1	..	7	..	..	..	..	..
Rheumatism	1	..	2	2	..	2	7	3	1	12	2	1	1	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	6	..	..	..	..	1
Constitutional Syphilis	..	..	..	..	1	1	2	4	..	9	1	..	..	3	1
Phthisis	..	..	1	..	1	3	5	5	..	30	..	2	2	..	1
Insanity	..	1	..	..	..	..	1	3	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	3	1	12	7	3	8	34	15	1	90	1	8	7	13	6
Pleurisy and Pneumonia	1	..	..	..	1	..	2	3	..	3	..	..	..	..	2
Skin Diseases	..	..	..	..	..	..	..	13	..	22	..	..	..	4	..
Dyspepsia	..	..	..	..	..	..	..	1	..	28	..	..	..	2	..
Accidents and diseases not classified	12	7	17	10	10	13	69	19	31	207	9	9	15	37	8
TOTAL	19	13	34	23	17	33	139	73	35	418	14	25	30	76	25

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

March, 1862.

FORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
0,967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC STITUTIONS.			POOR LAW DISTRICTS.									
	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
7	18	19	20	21	22	23	24	25	26	27		
	..	..	..	..	..	..	..	..	..	..	..	Small-pox
	1	..	..	..	..	..	..	..	..	1	2	Chicken-pox
	5	..	..	..	..	..	..	1	..	1	12	Measles
	..	..	..	1	..	..	1	..	3	..	6	Scarlatina
	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
	2	..	..	..	..	..	3	..	4	2	25	Whooping-cough
	..	..	..	..	..	..	..	..	..	..	1	Croup
	2	8	..	2	2	..	1	..	4	2	37	Diarrhœa
	..	..	..	..	1	..	..	1	..	..	6	Dysentery
	4	..	1	1	..	2	7	..	3	1	47	Continued Fever
	..	..	..	..	..	..	..	..	..	1	9	Erysipelas
	5	..	..	..	..	2	3	..	8	1	47	Rheumatism
	1	..	..	..	..	2	..	..	1	1	12	Neuralgic Affections
	2	..	..	..	..	..	1	..	..	1	24	Constitutional Syphilis
	6	..	..	..	1	..	3	..	2	1	59	Phthisis
	..	..	..	..	..	..	..	..	..	2	6	Insanity
	21	3	4	6	5	9	10	6	12	3	267	Bronchitis, Influenza, and Catarrah.
	2	..	..	..	..	..	2	..	..	..	14	Pleurisy & Pneumonia.
	3	..	..	..	1	..	..	..	..	3	48	Skin Disease.
	7	..	..	4	4	2	3	1	4	1	58	Dyspepsia
	68	2	2	4	5	4	36	3	20	8	572	Accidents and diseases not classified
	129	13	7	18	19	21	70	12	61	29	1252	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) " EVAN THOMAS,
(7) " J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, " W. H. HUGHES, " C. H. BRADDON,
(13) " H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) " J. TEALE,
(17) " T. F. BROWNBILL
(18) " J. O. BRADBURY,
(19) " W. B. STOTT,
(20) " T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.
(23) " W. B. MIDWOOD,
(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J. V. L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bowel.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	1	..	..	..	..	1	½
Measles	..	1	..	1	..	3	1	..	..	..	6	4
Whooping-cough	3	4	..	1	..	4	3	1	4	2	22	29
Scarlatina	..	1	..	..	..	..	1	..	..	..	2	3
Diarrhœa	1	2	..	2	1	..	..	..	1	..	7	5
Fever	2	..	1	..	..	..	‡2	‡1	..	..	6	13
Diseases of the Lungs	9	10	2	9	..	6	9	4	13	4	66	68
Other causes	*22	9	24	9	5	†4	13	11	18	6	121	136
TOTAL NO. OF DEATHS.	37	27	27	22	6	18	29	17	36	12	231	258½
TOTAL NO. OF BIRTHS.	33	42	10	18	17	28	34	22	59	21	284	296

* 11 Inquests. † 1 Inquest. ‡ Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 30th November.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	TOTAL.	DISEASES.	5 Weeks ending 30th November.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	TOTAL.
..	1	1	2	.... Small-pox	4	1	9	14
41	29	22	92	.... Chicken-pox	..	6	10	16
104	108	73	285	..... Measles	136	90	84	310
33	30	22	85	.... Scarlatina	15	12	14	41
10	9	12	31	.... Diphtheria	6	3	..	9
40	49	53	142	.. Whooping-cough ..	184	137	243	564
1	2	2	5	..... Croup	6	5	5	16
265	193	228	686	.....Diarrhœa.. ...	167	84	112	363
11	9	6	26	.... Dysentery	21	14	12	47
....	..	..	..	..... Cholera	..	..	..	..
19	21	21	61	.... Erysipelas	34	40	33	107
....	..	..	..	.. Puerperal Fever ..	..	..	..	..
10	11	10	31	..... Insanity	31	31	29	91
967	831	1252	3050	Bronchitis and Catarrh	1282	1005	1517	3804
22	27	21	70	..... Pleurisy	114	68	96	278
38	31	44	113	... Pneumonia				
3	3	9	15	.... Carbuncle	....	....	..	..
3929	3056	4005	10990	Accidents, and all other Diseases	3557	2840	3618	10015
5493	4410	5781	15684	..... TOTAL	5557	4336	5782	15675

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate.

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, MARCH 8, 1862. [No. 84.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·336	29·322	29·352	—	29·322	28 543(*a*)
Highest (Unreduced)	29·628	29·704	29 696	—	29·744	28·780
Lowest (Unreduced)	29·080	29·068	29·116	—	29·104	28·290
Range	0·548	0·636	0·580	—	0·640	0·490
Temperature.						
Adopted Mean	38·2	37·6	38·0	36·4	38·6	36·3
Range for Week	31·0	40·8	41·0	37·8	37·3	32·5
Daily Range	14·5	18·5	17·2	15·0	15·1	11·0
Maximum in Shade	56·0	57·8	55·5	55·8	56·8	52·0
Minimum in Shade	25·0	17·0	14·5	18·0	19·5	19·5
Maximum in Sun	—	67·0	—	72·6	63·0	—
Maximum in Sun: Black bulb in Vacuo	—	79·7	82·5	—	—	86·0
Minimum on Grass	—	9·2	9·0	21·4	9·8	17·6
Temperature in Ground at surface	—	36·72	36·90	—	—	—
Temperature 6 inches below	—	37·18	38·25	—	—	36·07
Temperature 12 inches below	—	38·08	39·03	—	—	35·98
Temperature of Evaporation	36·6	36·3	36·3	35·7	37·5	34·9
Temperature of Dew Point	34·4	34·5	33·9	34·7	36·0	32·9
Temperature of Air—Dew Point	3·8	3·1	4·1	1·7	2·6	3·4
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·30	2·33	2·26	2·37	2·49	2·15
Required to Saturate do	0·42	0·33	0·44	0·17	0·27	0·38
Weight of a cubic foot of Air	546·2	546·2	546·5	548·3	545·5	533·5
Degree of Humidity (Saturation—1,000)	0·860	0·889	0·854	0·941	0·913	0·880
	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	2·75	2·68	2·70	2·78	2·93	2·59
Elastic force of Vapour	0·199	0·194	0·195	0·201	0·212	0·187
Clouds (Covered—10 Clear—0)	—	8·6	5·2	—	6·9	6·8
Prevailing Winds	—	SE.	NW, SW.	S.	SW, S	NW, SW.
Rain	—	0·584	0·590	0·620	0·762	0·885
Days on which it fell	—	5	6	4	5	5
Ozonometer.						
Moffat (0—10)	—	3·71	—	3·57	5·00	3·43
Schonbein (0—10)	—	3·00	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·032	0·031	0·034	0·014	0·022	0·027
Weekly Evaporation	0·224	0·217	0·238	0·098	0·154	0·189

(*a*) Uncorrected for temperature.

There were 7 barometric oscillations during the week, the amount being 2·624 inches. There were 3 temperature oscillations during the week, the amount being 53·2°.

The mean temperature of the week was 2·2° below the average of the last thirteen years, and 7·0° below the corresponding week last year.

The minimum temperature on the grass, at several of the stations, was remarkably low for March, upon the 4th.

The mean temperature was the highest at Thelwall and the lowest at Ollerenshaw.

The degree of humidity was the highest at Bowdon and the lowest at Sale. Snow fell upon the 3rd, 4th, and 5th, being very heavy upon the latter date.

Ozone was found upon three days at Old Trafford, four days at Bowdon, seven days at Thelwall, and six days at Ollerenshaw.

The fall of rain in February, at the various stations, was as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	0·956	10
Sale	0·590	8
Bowdon	0·440	6
Thelwall	0·624	8
Ollerenshaw	1·395	10

The heaviest fall occurred, as usual, at the highest station.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester
March 13, 1862

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Paupe

During the Week ending Satur

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childr	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical
	1	2	3	4	5	6		7	8	9	10	11	12	13	1
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Measles	..	..	..	..	..	..	..	..	..	3	..	..	..	..	.
Scarlatina	..	..	..	..	..	..	..	..	1	..	..	..	..	1	.
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	1	..	1	3	5	..	..	..	..	..	..	8	
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diarrhœa	1	2	2	..	1	..	6	1	..	2	..	1	..	2	..
Dysentery	..	1	..	..	..	..	1	2	..	..	..	..	..	..	..
Continued Fever	1	..	2	1	..	1	5	3	1	..	2	1	2	2	4
Erysipelas	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Rheumatism	2	..	2	2	1	1	8	4	..	19	2	1	2	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	3	..	..	..	..	1
Constitutional Syphilis	..	..	..	..	..	..	..	3	1	7	2	1	..	..	..
Phthisis	1	..	..	2	2	1	6	8	..	17	..	1	4	3	3
Insanity	..	..	..	..	..	..	..	7	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	5	2	9	14	11	6	47	16	..	67	..	10	9	9	4
Pleurisy and Pneumonia	1	..	2	1	..	..	4	..	..	3	2	1	1		..
Skin Diseases	1	..	..	..	..	..	1	9	..	11	..	..	..	10	3
Dyspepsia	..	..	..	..	..	..	..	..	2	19	..	..	1	2	..
Accidents and diseases not classified	6	7	9	1	11	10	44	32	30	209	8	1	11	46	2
TOTAL	18	12	27	21	27	22	127	85	35	361	16	17	30	84	18

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

f March, 1862.

LFORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC NSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
7	18	19	20	21	22	23	24	25	26	27		
.	..	..	..	..	..	..	..	..	..	..	..	Small-pox
1	..	..	..	..	..	..	..	..	..	2	3	Chicken-pox
.	1	..	..	..	2	..	..	..	..	1	8	Measles
.	..	..	..	..	..	..	2	..	2	..	6	Scarlatina
.	..	.	..	..	..	..	..	..	..	..	..	Diphtheria
.	1	..	..	..	1	..	1	..	3	3	24	Whooping-cough
.	..	..	..	..	..	..	..	..	..	..	1	Croup
.	1	1	..	..	..	..	2	..	5	2	23	Diarrhœa
.	..	..	..	..	..	..	..	..	..	1	4	Dysentery
4	3	..	1	1	..	..	4	..	1	1	38	Continued Fever
.	..	..	..	..	..	..	..	..	..	1	2	Erysipelas
1	3	3	..	3	..	..	4	..	7	1	60	Rheumatism
.	4	..	2	..	..	..	..	..	..	1	12	Neuralgic Affections
1	1	..	..	..	..	..	..	..	2	..	18	Constitutional Syphilis
.	6	..	..	..	1	..	3	..	1	2	55	Phthisis
4	..	..	..	..	..	..	..	..	..	1	12	Insanity
5	22	7	3	6	6	3	11	3	10	4	251	Bronchitis, Influenza, and Catarrah.
.	..	..	..	..	..	..	1	..	1	2	15	Pleurisy & Pneumonia.
.	1	..	1	..	3	1	..	..	..	..	40	Skin Disease.
.	9	..	..	1	2	2	3	..	6	..	48	Dyspepsia
8	60	3	2	3	4	2	31	5	14	6	534	Accidents and diseases not classified
24	112	14	9	14	19	8	62	8	52	28	1154	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) " EVAN THOMAS,
(7) " J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, " W. H. HUGHES, " C. H. BRADDON,
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(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J. V. L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bowel.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	1
Measles	5	..	..	..	..	5	2	..	..	1	13	4
Whooping-cough	8	3	1	2	1	..	2	..	1	..	18	26
Scarlatina	..	1	..	..	..	..	1	..	..	..	2	3
Diarrhœa	..	..	1	..	..	..	..	1	..	1	3	6
Fever	1	1	1	..	..	2	..	1	1	..	7	12
Diseases of the Lungs	14	14	4	9	..	9	..	7	13	1	71	68
Other causes	16	18	14	8	15	13	11	11	12	10	128	138
TOTAL NO. OF DEATHS.	44	37	21	19	16	29	16	20	27	13	242	258
TOTAL NO. OF BIRTHS.	36	39	23	24	19	27	10	27	51	18	274	287

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 28th December.	5 Weeks ending 1st February.	4 weeks ending 1st March.	TOTAL.	DISEASES.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	4 Weeks ending 1st. March.	TOTAL.
1	1	..	2	.... Small-pox	1	9	2	12
29	22	6	57	.... Chicken-pox	6	10	7	23
108	73	17	198	..... Measles	90	84	66	240
30	22	21	73	.... Scarlatina	12	14	9	35
9	12	2	23	.... Diphtheria	3	..	2	5
49	53	56	158	.. Whooping-cough ..	137	243	140	520
2	2	5	9	..... Croup	5	5	6	16
193	228	216	637	.....Diarrhœa.. ...	84	112	105	301
9	6	3	18	.... Dysentery	14	12	22	48
..	..	....	..	..... Cholera	..	..	..	..
21	21	21	63	.... Erysipelas	40	33	32	105
..	..	....	..	.. Puerperal Fever ..	..	..	..	..
11	10	26	47	..... Insanity	31	29	40	100
831	1252	1012	3095	Bronchitis and Catarrh	1005	1517	1098	3620
27	21	10	58	..... Pleurisy	68	96	89	253
31	44	27	102	... Pneumonia ..				
3	9	2	14	.... Carbuncle	....	..	....	..
3056	4005	3320	10381	Accidents, and all other Diseases	2840	3618	3089	9547
4410	5781	4744	14935	..... TOTAL	4336	5782	4707	14825

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, MARCH 15, 1862. [No. 85.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, Esq.	Old Trafford, G. V. VERNON, Esq.	Sale, J. CURTIS, Esq.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, Esq.	Ollerenshaw, A. NEILD, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·717	29·772	29·800	—	29·791	28 946(*a*)
Highest } Unreduced	30·168	30·174	30·220	—	30·222	29·270
Lowest } Unreduced	29·284	29·293	29·310	—	29·220	28·510
Range	0·884	0·881	0·910	—	1·002	0·760
Temperature.						
Adopted Mean	45·8	47·2	45·6	45·8	45·3	43·5
Range for Week	15·0	19·2	24·6	19·2	19·7	17·9
Daily Range	6·3	8·1	13·7	10·7	10·4	9·5
Maximum in Shade	56·0	59·0	58·8	57·2	58·0	54·5
Minimum in Shade	41·0	39·8	34·2	38·0	38·3	36·6
Maximum in Sun	—	75·2	—	77·4	66·0	—
Maximum in Sun: Black bulb in Vacuo	—	80·8	88·0	—	—	96·0
Minimum on Grass	—	31·5	27·0	33·6	28·0	29·4
Temperature in Ground at surface	—	43·54	44·58	—	—	—
Temperature 6 inches below	—	43·37	44·63	—	—	41·43
Temperature 12 inches below	—	43·64	44·90	—	—	41·73
Temperature of Evaporation	43·7	45·5	42·5	44·4	43·7	42·3
Temperature of Dew Point	41·3	43·6	38·9	42·8	41·8	40·9
Temperature of Air—Dew Point	4·5	3·6	6·7	3·0	3·5	2·6
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·96	3·26	2·74	3·14	3·01	2·94
Required to Saturate do	0·60	0·46	0·78	0·42	0·45	0·31
Weight of a cubic foot of Air	544·5	543·9	546·3	545·9	546·4	533·2
Degree of Humidity (Saturation—1,000)	0·851	0·883	0·851	0·896	0·881	0·904
	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	3·60	3·93	3·28	3·80	3·66	3·54
Elastic force of Vapour	0·260	0·284	0·237	0·275	0·265	0·256
Clouds (Covered—10 Clear—0)	—	9·3	4·5	—	6·8	9·9
Prevailing Winds	—	SE, NE.	NE.	NE, S.	NE, SW.	E, W, S.
Rain	—	0·501	0·470	0·410	0·509	0·630
Days on which it fell	—	4	5	4	5	5
Ozonometer.						
Moffat (0—10)	—	2·43	—	2·14	3·43	5·86
Schonbein (0—10)	—	1·57	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·048	0·041	0·069	0·033	0·038	0·027
Weekly Evaporation	0·336	0·287	0·483	0·231	0·236	0·189

(*a*) Uncorrected for temperature.

There were 4 barometric oscillations during the week, the amount being 1·666 inches. There were 3 temperature oscillations, and the amount was only 6·0°.

The mean temperature of the week was 5·4° below the average of the last thirteen years, and 5·4° above the corresponding week last year; the past week was also warmer than any corresponding week during the last thirteen years.

The mean temperature was the highest at Old Trafford and the lowest at Ollerenshaw.

The degree of humidity was the highest at Ollerenshaw and the least at the Royal Infirmary and Sale.

Ozone occurred upon three days at Old Trafford, five days at Bowdon, six days at Thelwall, and seven days at Ollerenshaw.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester
March 18, 1862

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturda

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
DISEASES.	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	1	1	1	1	4	..	..	..	..	..	..	2	..
Croup	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Diarrhœa	..	..	..	..	1	..	1	1	..	3	..	..	..	7	5
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	*1	..	1	5	1	1	9	2	1	1	..	..	3	6	..
Erysipelas	1	..	1	..	..	..	2	..	..	..	1	2	..	..	..
Rheumatism	4	1	..	6	2	..	13	2	..	14	1	..	2	1	1
Neuralgic Affections	..	..	..	..	..	..	..	..	..	6	..	..	..	..	..
Constitutional Syphilis	1	..	..	..	..	..	1	..	..	11	..	1	1	4	..
Phthisis	..	..	..	..	..	1	1	2	..	24	2	1	2	3	..
Insanity	..	..	..	..	..	1	1	3	..	1	1	..	..	..	..
Bronchitis, Influenza & Catarrh	7	6	7	9	14	8	51	18	1	58	1	7	..	20	3
Pleurisy and Pneumonia	..	..	..	..	..	..	..	..	..	2	1	..	..	..	1
Skin Diseases	1	..	..	..	..	..	1	9	..	21	..	..	..	5	3
Dyspepsia	..	..	..	..	..	1	1	2	..	20	..	..	1	5	2
Accidents and diseases not classified	14	12	11	6	9	14	66	35	29	261	10	4	11	50	8
TOTAL	29	19	21	27	28	27	151	74	31	422	17	16	21	103	24

* Typhus.

ITARY ASSOCIATION.

ublic Institutions of Manchester and adjoining Districts,

March, 1862.

FORD.		HULME.			CHORL-TON.	ARD-WICK					
,329		.... 477.			.. 646. ..	508.	....	....		.....	Area in Statute Acres.
,967.		.. 68,209. ..			.. 44,850 ..	21739	....	....		.....	Population in 1861.
PUBLIC STITUTIONS.		POOR LAW DISTRICTS.									
Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	1	Small-pox
..	..	..	..	..	..	..	..	..	1	3	Chicken-pox
3	..	..	..	..	..	..	..	..	..	5	Measles
..	..	..	..	..	..	..	..	1	..	2	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	Diphtheria
6	..	..	1	..	..	1	1	4	2	22	Whooping-cough
..	..	..	..	..	..	..	..	..	..	1	Croup
2	2	..	..	..	..	3	..	2	2	30	Diarrhœa
..	..	..	..	..	1	..	..	..	..	1	Dysentery
2	..	1	2	1	1	4	..	2	1	41	Continued Fever
1	..	..	..	..	..	1	..	..	1	8	Erysipelas
6	1	..	..	..	1	7	..	2	2	54	Rheumatism
3	..	..	..	..	1	..	..	..	1	11	Neuralgic Affections
1	..	..	..	1	..	1	..	1	1	24	Constitutional Syphilis
7	..	1	..	1	2	4	..	3	2	56	Phthisis
..	..	..	..	..	..	..	..	..	2	10	Insanity
37	3	..	3	5	3	16	1	8	4	244	Bronchitis, Influenza, and Catarrah.
2	..	..	..	..	1	2	..	1	..	10	Pleurisy & Pneumonia.
15	1	..	..	..	3	2	..	..	8	73	Skin Disease.
9	2	..	2	3	..	5	..	5	2	16	Dyspepsia
54	2	2	1	15	7	32	3	20	5	628	Accidents and diseases not classified
148	11	4	9	26	20	78	5	49	34	1283	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	½
Measles	..	2	1	..	..	4	2	..	1	..	10	6½
Whooping-cough	6	2	1	2	..	3	2	..	2	2	20	22
Scarlatina	1	1	1	1	..	..	..	..	1	..	5	2
Diarrhœa	..	1	1	..	..	3	..	..	..	1	6	6
Fever	3	1	..	..	..	1	..	†1	‡2	†1	9	9
Diseases of the Lungs	11	5	2	11	..	10	2	5	10	4	60	67
Other causes	7	9	24	5	7	*11	10	5	15	5	98	138
TOTAL NO. OF DEATHS.	28	21	30	19	7	32	16	11	31	13	208	251
TOTAL NO. OF BIRTHS.	52	42	28	24	27	33	19	31	54	21	331	283

* 2 Inquests. † Typhus. ‡ 1 Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 28th December.	5 Weeks ending 1st February.	4 weeks ending 1st March.	TOTAL.	DISEASES.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	4 Weeks ending 1st. March.	TOTAL.
1	1	..	2	.... Small-pox	1	9	2	12
29	22	6	57	.... Chicken-pox	6	10	7	23
108	73	17	198	..... Measles	90	84	66	240
30	22	21	73	.... Scarlatina	12	14	9	35
9	12	2	23	.... Diphtheria	3	..	2	5
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2	2	5	9	..... Croup	5	5	6	16
193	228	216	637	.....Diarrhœa.. ...	84	112	105	301
9	6	3	18	.... Dysentery	14	12	22	48
..	..	....	..	..... Cholera	..	..	..	..
21	21	21	63	.... Erysipelas	40	33	32	105
..	..	....	..	.. Puerperal Fever ..	..	..	..	..
11	10	26	47	..... Insanity	31	29	40	100
831	1252	1012	3095	Bronchitis and Catarrh	1005	1517	1098	3620
27	21	10	58	..... Pleurisy	68	96	89	253
31	44	27	102	... Pneumonia ..				
3	9	2	14	.... Carbuncle	....	..	....	..
3056	4005	3320	10381	Accidents, and all other Diseases	2840	3618	3089	9547
4410	5781	4744	14935	..... TOTAL	4336	5782	4707	14825

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HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

Vol. II.] WEEK ENDING SATURDAY, MARCH 22, 1862. [No. 86.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·663	29·673	29·715	—	29·694	
Highest (Unreduced)	29·974	29·982	30·010	—	30·018	
Lowest (Unreduced)	29·506	29·454	29·518	—	29·522	
Range	0·468	0·528	0·492	—	0·496	
Temperature.						
Adopted Mean	38·9	39·5	38·6	38·9	38·5	
Range for Week	19·0	26·8	28·0	24·4	23·4	
Daily Range	7·7	11·0	13·1	12·1	11·1	
Maximum in Shade	48·0	51·8	50·2	48·8	48·0	
Minimum in Shade	29·0	25·0	22·2	24·4	24·6	
Maximum in Sun	—	72·2	—	72·0	59·0	
Maximum in Sun: Black bulb in Vacuo	—	86·0	87·5	—	—	
Minimum on Grass	—	15·0	17·2	23·3	13·7	
Temperature in Ground at surface	—	38·06	37·43	—	—	
Temperature 6 inches below	—	38·89	39·37	—	—	
Temperature 12 inches below	—	40·68	41·68	—	—	
Temperature of Evaporation	36·7	36·9	36·6	36·8	35·7	
Temperature of Dew Point	33·7	33·5	33·9	33·0	32·0	
Temperature of Air—Dew Point	5·2	6·0	4·7	5·9	6·5	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·25	2·23	2·26	2·27	2·09	
Required to Saturate do	0·54	0·62	0·50	0·52	0·66	
Weight of a cubic foot of Air	551·6	551·1	552·8	552·5	554·6	
Degree of Humidity (Saturation—1,000)	0·832	0·798	0·842	0·840	0·776	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	2·67	2·66	2·70	2·60	2·50	
Elastic force of Vapour	0·193	0·192	0·195	0·188	0·181	
Clouds (Covered—10 Clear—0)	—	7·5	6·1	—	6·9	
Prevailing Winds	—	NE.	NE.	NE.	NE,E.	
Rain	—	0·012	0·030	0·050	0·293	
Days on which it fell	—	1	2	2	2	
Ozonometer.						
Moffat (0—10)	—	0·00	—	0·50	2·57	
Schonbein (0—10)	—	0·00	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·044	0·050	0·039	0·049	0·052	
Weekly Evaporation	0·308	0·350	0·273	0·343	0·364	

There were 2 barometric oscillations during the week, the amount being 1·070 inches. There were 3 temperature oscillations, the amount being 22·6°.

The mean temperature of the week was 2·4° below the average of the last thirteen years, and 2·5° below the corresponding week last year.

The mean temperature was the highest at Old Trafford and the lowest at Thelwall.

The degree of humidity was the highest at Sale and the least at Thelwall.

Ozone occurred upon two days at Bowdon, and five days at Thelwall, but none was found at Old Trafford.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester
March 27, 1862

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturdo

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childre	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	1	..	1	2	..	..	..	..	..	..	1	..
Scarlatina	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	2	..	2	4	..	..	..	..	1	..	5	6
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	1	..	..	..	1	..	2	..	..	4	..	..	1	2	..
Dysentery	..	..	..	1	..	..	1	..	1	..	..	1	..	..	..
Continued Fever	2	..	1	2	..	1	6	4	1	4	..	..	2	6	.
Erysipelas	..	..	..	..	..	..	..	1	..	4	..	..	..	..	.
Rheumatism	..	2	4	1	1	..	8	4	5	14	3	1	..	..	.
Neuralgic Affections	..	..	..	..	..	..	..	..	..	5	1	..	1	..	.
Constitutional Syphilis	..	..	..	..	..	2	2	2	..	9	..	..	..	1	1
Phthisis	1	1	1	..	..	1	4	2	..	28	1	2	1	2	.
Insanity	..	1	..	..	..	..	1	2	..	..	1	..	1	..	.
Bronchitis, Influenza & Catarrh	2	4	2	6	4	8	26	9	2	80	4	4	6	8	.
Pleurisy and Pneumonia	..	..	..	..	..	..	..	..	..	2	..	..	3	1	
Skin Diseases	1	1	..	..	1	3	6	7	..	28	..	..	..	1	
Dyspepsia	..	..	..	..	..	..	..	..	..	36	..	..	..	1	.
Accidents and diseases not classified	5	12	13	12	13	17	72	41	25	210	4	13	12	39	
TOTAL	12	21	21	25	20	35	134	72	35	424	14	23	27	67	2

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

f March, 1862.

LFORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	..	Small-pox
..	..	..	..	..	..	..	..	..	..	2	2	Chicken-pox
..	11	..	..	1	..	..	1	1	..	..	18	Measles
..	..	..	..	..	..	..	..	..	..	..	2	Scarlatina
..	..	.	..	..	..	..	..	..	..	..	..	Diphtheria
..	6	..	..	..	..	..	8	..	2	2	35	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	..	Croup
1	3	2	..	..	..	1	..	..	3	2	23	Diarrhœa
..	..	..	..	..	..	..	..	..	1	..	4	Dysentery
..	2	..	..	2	1	..	2	1	2	1	36	Continued Fever
..	2	..	..	..	..	..	..	..	..	1	8	Erysipelas
2	7	2	..	1	1	1	3	..	4	3	60	Rheumatism
..	3	..	..	..	..	..	..	..	..	4	18	Neuralgic Affections
1	2	..	..	1	..	..	..	..	3	1	24	Constitutional Syphilis
..	6	..	..	..	1	..	4	..	2	2	57	Phthisis
1	..	..	..	1	..	..	..	..	..	2	9	Insanity
6	48	4	3	6	5	1	16	1	5	2	242	Bronchitis, Influenza, and Catarrah.
..	2	..	1	..	..	2	1	..	..	..	13	Pleurisy & Pneumonia.
2	4	..	..	..	1	1	4	..	..	4	64	Skin Disease.
1	7	1	..	2	1	1	4	..	7	1	65	Dyspepsia
2	48	6	4	2	2	5	24	4	20	7	555	Accidents and diseases not classified
16	151	15	8	16	12	12	67	7	49	34	1235	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,

(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, ,, W. H. HUGHES, ,, C. H. BRADDON,
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(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	1	..	..	..	..	..	..	..	..	1	..
Measles	..	..	1	..	..	2	2	..	..	..	5	9
Whooping-cough	4	..	..	2	..	1	3	..	..	..	10	21
Scarlatina	1	..	..	..	1	..	..	..	..	..	2	3
Diarrhœa	..	..	..	..	..	..	..	..	1	..	1	6
Fever	1	..	2	..	*1	..	..	2	1	..	7	8
Diseases of the Lungs	12	9	2	5	..	11	.	8	12	7	66	67
Other causes	16	12	35	6	7	6	10	8	20	8	128	127
TOTAL NO. OF DEATHS.	34	22	40	13	9	20	15	18	34	15	220	241
TOTAL NO. OF BIRTHS.	35	29	28	14	19	34	21	23	57	16	276	295

* Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 28th December.	5 Weeks ending 1st February.	4 weeks ending 1st March.	TOTAL.	DISEASES.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	4 Weeks ending 1st. March.	TOTAL.
1	1	..	2	.... Small-pox	1	9	2	12
29	22	6	57	.... Chicken-pox	6	10	7	23
108	73	17	198	..... Measles	90	84	66	240
30	22	21	73	.... Scarlatina	12	14	9	35
9	12	2	23	.... Diphtheria	3	..	2	5
49	53	56	158	.. Whooping-cough ..	137	243	140	520
2	2	5	9	..... Croup	5	5	6	16
193	228	216	637	.....Diarrhœa.. ...	84	112	105	301
9	6	3	18	.... Dysentery	14	12	22	48
..	..	....	..	..... Cholera	..	..	..	..
21	21	21	63	.... Erysipelas	40	33	32	105
..	..	....	..	.. Puerperal Fever ..	..	..	..	..
11	10	26	47	..... Insanity	31	29	40	100
831	1252	1012	3095	Bronchitis and Catarrh	1005	1517	1098	3620
27	21	10	58	..... Pleurisy	68	96	89	253
31	44	27	102	... Pneumonia ..				
3	9	2	14	.... Carbuncle	....	..	....	..
3056	4005	3320	10381	Accidents, and all other Diseases	2840	3618	3089	9547
4410	5781	4744	14935	..... TOTAL	4336	5782	4707	14825

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, MARCH 29, 1862. [No. 87.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·333	29·313	29·343	—	29·328	28·491
Highest (Unreduced)	29·722	29·760	29·770	—	29·760	28·834
Lowest (Unreduced)	29·160	29·130	29·178	—	29·152	28·320
Range	0·562	0·630	0·592	—	0·608	0·514
Temperature.						
Adopted Mean	41·8	43·2	42·8	42·3	42·2	39·5
Range for Week	25·0	33·0	26·0	30·5	24·8	23·4
Daily Range	9·7	12·2	12·0	11·5	10·9	10·2
Maximum in Shade	55·0	59·0	56·8	58·0	57·0	54·9
Minimum in Shade	30·0	26·0	30·8	27·5	32·2	31·5
Maximum in Sun	—	69·5	—	78·8	63·5	—
Maximum in Sun: Black bulb in Vacuo	—	77·3	88·3	—	—	96·6
Minimum on Grass	—	24·0	29·0	27·4	22·0	—
Temperature in Ground at surface	—	39·97	40·87	—	—	—
Temperature 6 inches below	—	3 ·92	40·90	—	—	37·50
Temperature 12 inches below	—	40·48	41·87	—	—	38·18
Temperature of Evaporation	40·4	41·6	41·1	41·1	41·3	38·2
Temperature of Dew Point	38·7	39·7	39·1	39·7	40·0	36·5
Temperature of Air—Dew Point	3·1	3·5	3·7	2·3	2·2	3·0
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·74	2·80	2·75	2·80	2·87	2·51
Required to Saturate do	0·34	0·42	0·43	0·33	0·25	0·34
Weight of a cubic foot of Air	541·9	540·0	540·9	541·1	541·1	528·8
Degree of Humidity (Saturation—1,000)	0·896	0·874	0·864	0·904	0·928	0·896
	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	3·25	3·37	3·29	3·37	3·42	2·99
Elastic force of Vapour	0·235	0·244	0·238	0·244	0·247	0.216
Clouds (Covered—10 Clear—0)	—	9·6	7·5	—	9·8	9·0
Prevailing Winds	—	NE.	NE, SE.	SE,E.	E,SE.	SE.
Rain	—	2·562	2·320	2·200	2·198	1·685
Days on which it fell	—	5	6	5	7	5
Ozonometer.						
Moffat (0—10)	—	0·00	—	1·28	1·07	5·14
Schonbein (0—10)	—	0·00	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·030	0·035	0·037	0·025	0·022	0·026
Weekly Evaporation	0·210	0·245	0·259	0·175	0·154	0·182

There were 6 barometric oscillations during the week, the amount being 0·968 inches. There were 4 temperature oscillations, the amount being 27·2°.

The mean temperature of the week was 1·4° above the average of the last thirteen years, and 0·8° below the corresponding week last year.

The mean temperature was the highest at Old Trafford and the lowest at Ollerenshaw.

The degree of humidity was the highest at Bowdon and the least at Sale.

The fall of rain during the week was excessively large, the amount at Old Trafford exceeded the average fall for the entire month of March for 47 years.

Ozone occurred upon 4 days at Bowdon, 2 days at Thelwall, and 7 days at Ollerenshaw, but none was found at Old Trafford.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester
April 2, 1862.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturda

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	2	1	..	..	1	4	..	..	..	3	..	2	..	..
Scarlatina	..	..	..	..	..	1	1	..	..	..	..	1	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Whooping-cough	..	..	1	..	..	..	1	..	..	2	..	..	..	4	..
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	..	..	..	..	..	..	1	..	2	..	2	..	2	1
Dysentery	..	..	..	1	..	..	1	1	..	..	..	..	..	..	..
Continued Fever	1	..	..	..	2	..	3	5	1	1	2	2	2	5	..
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Rheumatism	3	..	4	3	4	..	14	3	..	8	3	2	3	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2
Constitutional Syphilis	..	..	1	..	..	1	2	2	..	4	..	1	..	2	..
Phthisis	1	..	.	..	2	4	7	..	1	27	2	..	4	1	..
Insanity	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	2	4	9	7	11	6	39	14	..	62	2	3	5	17	1
Pleurisy and Pneumonia	1	..	1	..	..	..	2	1	..	2	1	..	1	1	3
Skin Diseases	..	..	..	..	..	..	..	18	..	10	..	..	2	6	3
Dyspepsia	..	..	..	..	..	1	1	3	..	30	1	..	..	6	4
Accidents and diseases not classified	7	10	11	9	16	9	62	29	29	264	8	12	10	42	2
TOTAL	15	16	28	20	35	23	137	78	31	413	22	24	30	86	16

ITARY ASSOCIATION.

ublic Institutions of Manchester and adjoining Districts,

March, 1862.

FORD.		HULME.			CHORL-TON.	ARD-WICK					
,329		.... 477.			.. 646. ..	508.	....	....		.....	Area in Statute Acres.
,967.		.. 68,209. ..			.. 44,850 ..	21739	....	....		.....	Population in 1861.
PUBLIC STITUTIONS.		POOR LAW DISTRICTS.									
Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	Small-pox
..	..	..	..	1	1	..	..	..	2	4	Chicken-pox
1	..	..	..	..	..	..	..	..	..	10	Measles
..	..	..	..	..	..	1	..	..	..	3	Scarlatina
..	..	..	..	..	..	..	..	..	..	1	Diphtheria
1	..	..	..	..	..	4	..	2	2	16	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	Croup
1	3	1	..	..	..	..	..	3	2	20	Diarrhœa
..	..	..	..	..	..	..	..	..	..	2	Dysentery
2	..	1	..	..	..	2	..	2	1	30	Continued Fever
..	..	..	..	..	..	..	..	..	..	2	Erysipelas
..	3	..	..	1	..	4	1	6	2	51	Rheumatism
..	..	..	..	..	2	2	..	2	1	10	Neuralgic Affections
2	..	..	..	..	1	..	..	1	..	17	Constitutional Syphilis
3	..	..	1	2	..	2	..	..	2	53	Phthisis
..	..	1	..	..	..	..	..	..	2	8	Insanity
20	5	2	3	3	4	15	1	10	4	220	Bronchitis, Influenza, and Catarrh.
..	..	..	1	..	..	3	..	1	1	17	Pleurisy & Pneumonia.
7	..	1	..	1	1	2	..	1	4	61	Skin Disease.
3	..	..	1	4	1	3	..	6	..	66	Dyspepsia
95	2	..	3	8	3	23	2	18	3	631	Accidents and diseases not classified
135	13	6	9	20	13	61	4	52	26	1222	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	½
Measles	..	..	1	..	..	2	1	..	..	1	5	8½
Whooping-cough.....	3	..	..	3	..	2	3	..	3	..	14	17½
Scarlatina	..	2	1	..	..	..	..	..	1	..	4	3
Diarrhœa	3	..	..	1	1	1	..	1	2	1	10	4
Fever	3	..	..	2	1	2	2	..	‡4	..	14	7
Diseases of the Lungs ..	8	11	3	13	..	12	1	8	17	4	77	66
Other causes.....	*22	14	24	†13	13	‡14	14	6	11	‖6	137	119
TOTAL NO. OF DEATHS.	39	27	29	32	15	33	21	15	38	12	261	225½
TOTAL NO. OF BIRTHS.	45	35	13	25	29	36	20	31	55	23	312	291

* 8 Inquests. † 12 Inquest, 9 returned "Natural Causes," ‡ 1 Inquest. ‡ 1 Typhus. ‖ 6 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 28th December.	5 Weeks ending 1st February.	4 weeks ending 1st March.	TOTAL.	DISEASES.	4 Weeks ending 28th December.	5 Weeks ending 1st February.	4 Weeks ending 1st. March.	TOTAL.
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108	73	17	198	..... Measles	90	84	66	240
30	22	21	73	.... Scarlatina	12	14	9	35
9	12	2	23	.... Diphtheria	3	..	2	5
49	53	56	158	.. Whooping-cough ..	137	243	140	520
2	2	5	9	..... Croup	5	5	6	16
193	228	216	637	.....Diarrhœa.. ...	84	112	105	301
9	6	3	18	.... Dysentery	14	12	22	48
..	..	....	..	..... Cholera	..	..	..	..
21	21	21	63	.... Erysipelas	40	33	32	105
..	..	....	..	.. Puerperal Fever ..	..	..	..	..
11	10	26	47	..... Insanity	31	29	40	100
831	1252	1012	3095	Bronchitis and Catarrh	1005	1517	1098	3620
27	21	10	58	..... Pleurisy	68	96	89	253
31	44	27	102	... Pneumonia ..				
3	9	2	14	.... Carbuncle	....	..	....	..
3056	4005	3320	10381	Accidents, and all other Diseases	2840	3618	3089	9547
4410	5781	4744	14935	..... TOTAL	4336	5782	4707	14825

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Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate.

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER;

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, APRIL 5, 1862. [No. 88.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·519	29·550	29·570	——	29·560	29·539	28 690
Highest } Unreduced	29·970	30·009	30·029	——	30·080	30·008	29·110
Lowest } Unreduced	29·284	29·270	29·318	——	29·394	29·259	28·422
Range	0·686	0·739	0·711	——	0·776	0·749	0·688
Temperature.							
Adopted Mean	45·7	46·6	46·7	45·7	48·0	45·5	43·9
Range for Week	20·0	25·5	27·2	25·3	26·2	26 7	23·2
Daily Range	11·5	14·4	15·6	15·1	15·2	14·0	13 1
Maximum in Shade	59·0	59·8	61·2	59·8	60·8	58·9	58·0
Minimum in Shade	39·0	34·3	34·0	34·5	34·6	32 2	34 8
Maximum in Sun	——	78·2	——	90·0	69·0	78·8	——
Maximum in Sun: Black bulb in Vacuo	——	93·0	91·2	——	——	——	100·3
Minimum on Grass	——	28·8	27·5	32·5	31·3	30·4	31·0
Temperature in Ground at surface	——	43·61	44·84	——	——	——	——
Temperature 6 inches below	——	43·73	45·04	——	——	——	42·71
Temperature 12 inches below	——	44·85	46·07	——	——	——	43·30
Temperature of Evaporation	43·9	44·3	43·6	43·4	45·9	42·7	41·2
Temperature of Dew Point	41·8	41·7	40·1	40·8	43·8	39·5	38·1
Temperature of Air—Dew Point	3·9	4·9	6·6	4·9	4·2	6·0	5·8
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	3·01	3·04	2·91	2·91	3·27	2·79	2·65
Required to Saturate do	0·53	0·62	0·76	0·63	0·62	0·71	0·64
Weight of a cubic foot of Air	542·0	540·4	540·9	541·9	539·0	541·6	527·9
Degree of Humidity (Saturation—1,000)	0·871	0·839	0·790	0·829	0·853	0·799	0·793
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	3·66	3·65	3·43	——	3·96	3·35	3·18
Elastic force of Vapour	0·265	0·264	0·248	0·255	0·286	0·242	0·230
Clouds (Covered—10 Clear—0)	——	8·0	8·1	——	6·3	6·8	8·6
Prevailing Winds	——	SW, E.	SW.	S.	S.	E, SE.	SW.
Rain	——	0·940	1·060	0·690	0·954	1·166	0·570
Days on which it fell	——	6	6	6	6	7	6
Ozonometer.							
Moffat (0—10)	——	1·28	——	4·50	4·71	2·71	4·85
Schonbein (0—10)	——	1·14	——	——	——	——	——
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·042	0·054	0·071	0·052	0·049	0·063	0·057
Weekly Evaporation	0·294	0·378	0·497	0·364	0·343	0·441	0·399

There were 4 barometric oscillations during the week, the amount being 1·606 inches. There were 3 temperature oscillations at 8 a m., the amount being 28·2°.

The mean temperature of the week was 1·0° above the average of the last thirteen years, and 3·7° above the corresponding week last year.

The mean temperature was the highest at Thelwall and the lowest at Ollerenshaw.

The degree of humidity was the highest at the Royal Infirmary and the least at Sale.

Ozone occurred upon 2 days at Old Trafford, 3 days at Eccles, and 7 days each at Bowdon, Thelwall, and Ollerenshaw.

I have much pleasure in calling attention to a return for Eccles, which Mr. Thomas Mackereth has kindly undertaken to supply.

The fall of rain during the month of March has been as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	3·769	18
Sale	3·510	21
Bowdon	3·300	17
Thelwall	3·865	21
Ollerenshaw	3·225	18

The greatest fall of rain appears to have occurred at the lowest station, and the least fall at the highest station.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester,
April 9, 1862.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Saturd

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Measles	..	1	1	..	..	1	3	..	1	..	..	..	..	..	..
Scarlatina	..	..	1	..	..	..	1	..	..	..	1	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	3	..	2	5	2	..	4	..	..	..	9	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	..	1	2	..	..	3	2	..	2	..	..	..	3	3
Dysentery	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..
Continued Fever	1	..	4	3	2	..	10	3	2	..	..	..	..	6	..
Erysipelas	..	..	..	..	..	..	..	3	..	2	..	..	..	1	..
Rheumatism	3	..	3	5	4	..	15	1	..	12	..	3	3	..	..
Neuralgic Affections	..	1	..	..	..	..	1	..	..	5	2	..	..	..	3
Constitutional Syphilis	..	..	..	..	..	..	..	1	..	6	..	1	..	2	..
Phthisis	1	..	2	..	3	5	11	3	1	20	2	2	1	4	2
Insanity	1	..	..	1	..	..	2	5	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	4	3	12	4	13	6	42	22	..	60	5	5	3	15	4
Pleurisy and Pneumonia	1	..	..	..	..	..	1	4	..	2	..	1	1	..	1
Skin Diseases	1	..	..	..	..	1	2	5	..	17	..	1	..	6	4
Dyspepsia	..	..	..	..	..	..	..	1	..	15	..	..	1	1	..
Accidents and diseases not classified	10	15	21	14	4	16	80	32	32	205	15	14	4	50	7
TOTAL	22	20	45	32	26	32	177	85	36	351	25	27	13	97	25

|| Return not receiv

ITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

April, 1862.

FORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....	....	477.	....	..	646.	..	508.	....	....	.....	Area in Statute Acres.
0,967.	....	..	68,209.	..	..	44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC NSTITUTIONS.			POOR LAW DISTRICTS.									
Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	Small-pox
..	..	..	..	..	..	..	..	..	4	5	Chicken-pox
..	..	..	..	..	..	..	..	..	..	4	Measles
..	..	..	..	..	..	..	..	..	..	2	Scarlatina
..	.	..	..	..	..	..	..	..	..	..	Diphtheria
1	..	..	..	1	..	6	1	2	4	40	Whooping-cough
..	..	..	..	..	..	2	..	..	..	2	Croup
1	1	..	..	..	1	..	..	3	2	23	Diarrhœa
..	..	..	..	1	..	..	..	..	..	3	Dysentery
6	..	1	..	..	1	3	..	1	1	35	Continued Fever
..	..	..	..	..	1	1	..	..	..	8	Erysipelas
4	..	..	..	..	2	5	1	2	2	51	Rheumatism
1	..	..	..	1	..	2	..	4	1	20	Neuralgic Affections
1	..	..	..	..	..	3	..	1	1	16	Constitutional Syphilis
4	..	..	..	2	..	3	..	1	4	62	Phthisis
..	..	..	1	..	..	..	..	..	2	12	Insanity
23	6	3	2	11	1	17	2	6	3	236	Bronchitis, Influenza, and Catarrah.
..	..	..	..	..	..	2	..	2	..	15	Pleurisy & Pneumonia.
5	2	..	..	1	..	4	..	..	2	51	Skin Disease.
3	..	..	2	2	1	2	..	4	1	38	Dyspepsia
99	2	2	3	4	3	25	1	15	9	605	Accidents and diseases not classified
148	11	6	8	23	10	75	5	41	36	1228	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) " EVAN THOMAS,
(7) " J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) } Mr. W. J. MALLETT,
(10) } " W. H. HUGHES,
(11) } " C. H. BRADDON,
(12) }
(13) " H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) " J. TEALE,
(17) " T. F. BROWNBILL
(18) " J. O. BRADBURY,
(19) " W. B. STOTT,
(20) " T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.
(23) " W. B. MIDWOOD,
(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	.
Measles	..	1	1	1	..	3	2	..	..	..	8	8
Whooping-cough	5	..	1	3	1	5	2	1	4	..	22	15½
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	3
Diarrhœa	..	..	1	1	..	1	3	..	1	..	7	5
Fever	3	2	3	1	..	..	2	1	1	2	15	9
Diseases of the Lungs	12	15	..	5	..	9	4	7	12	..	64	68½
Other causes	15	*23	16	9	22	†14	25	‡20	17	⁑6	167	123
TOTAL NO. OF DEATHS.	35	41	22	20	23	32	38	29	35	8	283	232
TOTAL NO. OF BIRTHS	52	43	14	18	16	43	51	33	58	18	346	298

* 11 Inquests. † 3 Inquests. ‡ 8 Inquests. ⁑ 2 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 Weeks ending 1st February.	4 weeks ending 1st March.	4 Weeks ending 29th March.	TOTAL.	DISEASES.	5 Weeks ending 1st February.	4 Weeks ending 1st. March.	4 Weeks ending 29th March.	TOTAL.
1	..	..	1	Small-pox	9	2	1	12
22	6	1	29	Chicken-pox	10	7	10	27
73	17	31	121	Measles	84	66	41	191
22	21	13	56	Scarlatina	14	9	13	36
12	2	7	21	Diphtheria	..	2	1	3
53	56	46	155	Whooping-cough	243	140	97	480
2	5	5	12	Croup	5	6	2	13
228	216	204	648	Diarrhœa	112	105	96	313
6	3	4	13	Dysentery	12	22	11	45
..	....	..	..	Cholera	..	..	..	..
21	21	18	60	Erysipelas	33	32	20	85
..	....	1	1	Puerperal Fever	..	..	..	..
10	26	20	56	Insanity	29	40	39	108
1252	1012	924	3188	Bronchitis and Catarrh	1517	1098	957	3572
21	10	19	50	Pleurisy	96	89	55	240
44	27	20	91	Pneumonia				
9	2	7	18	Carbuncle	..	....	....	..
4005	3320	3281	10606	Accidents, and all other Diseases	3618	3089	3181	9888
5781	4744	4601	15126	TOTAL	5782	4707	4521	15013

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COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, APRIL 12, 1862. [No. 89.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	30·025	30·069	30·097	—	30·096	30·061	29·154
Highest (Unreduced)	30·264	30·288	30·338	—	30·328	30·257	29·392
Lowest (Unreduced)	29·660	29·684	29·754	—	29·742	29·704	28·858
Range	0·604	0·604	0·584	—	0·586	0·553	0·534
Temperature.							
Adopted Mean	43·1	44·8	44·7	43·3	43·2	43·2	41·8
Range for Week	28·0	35·3	35·2	33·4	31·7	31·8	31·7
Daily Range	11·1	15·7	19·7	16·7	12·8	12·0	13·3
Maximum in Shade	57·0	60·3	60·2	59·8	57·2	55·6	54·9
Minimum in Shade	29·0	25·0	25·0	26·4	25·5	23·8	23·2
Maximum in Sun	—	81·8	—	92·0	68·4	69·6	—
Maximum in Sun: Black bulb in Vacuo	—	92·0	92 0	—	—	—	99·4
Minimum on Grass	—	20·0	18·5	23·4	21·0	20·9	19·5
Temperature in Ground at surface	—	42·27	43·13	—	—	—	—
Temperature 6 inches below	—	42·85	44·01	—	—	—	41·44
Temperature 12 inches below	—	44·44	46·10	—	—	—	43·34
Temperature of Evaporation	40·6	41·6	41·4	40·9	39·9	39·6	38·2
Temperature of Dew Point	37·6	37·9	37·6	38·1	36·0	35·3	33·9
Temperature of Air—Dew Point	5·5	6·9	7·1	5·2	7·2	7·9	7·9
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·61	2·64	2·61	2·65	2·46	2·40	2·24
Required to Saturate do	0·60	0·74	0·76	0·58	0·76	0·82	0·82
Weight of a cubic foot of Air	553·2	552·2	553·6	554·4	554·6	554·0	538·2
Degree of Humidity (Saturation—1,000)	0·809	0·764	0·756	0·813	0·761	0·730	0·744
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	3·11	3·15	3·11	3·18	2·93	2·85	2·70
Elastic force of Vapour	0·225	0·228	0·225	0·230	0·212	0·206	0·195
Clouds (Covered—10 Clear—0)	—	6·2	6·0	—	6·5	6·9	7·3
Prevailing Winds	—	E,NE.	SE,NE.	E,NE.	E,NE.	E,NE.	SE,NE.
Rain	—	0·700	0·470	0·590	0·391	0·307	0·630
Days on which it fell	—	4	4	3	4	4	3
Ozonometer.							
Moffat (0—10)	—	1·57	—	1·57	4·50	2·71	2·43
Schonbein (0—10)	—	1·14	—	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·053	0·069	0·071	0·050	0·067	0·073	0·070
Weekly Evaporation	0·371	0·483	0·497	0·350	0·469	0·511	0·490

There were 4 barometric oscillations during the week, the amount being 1·286 inches. There were 6 temperature oscillations, the amount being 34·8°.

The mean temperature of the week was 1·2° below the average of the last thirteen years, and 0·3° above the corresponding week last year.

The mean temperature was the highest at Old Trafford and the lowest at Ollerenshaw.

The degree of humidity was the highest at Bowdon and the least at Eccles.

Ozone occurred upon 1 day at Old Trafford, 3 days at Bowdon, 7 days at Thelwall, 5 days at Eccles, and 7 days at Ollerenshaw.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester,
April 15, 1862.

MANCHESTER AND SALF

New Cases of Disease coming under Treatment in Pauper, C

During the Week ending Saturday

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	..	..	..	*1	..	1	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	4	..	4	8	..	..	2	..	1	..	8	2
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	2	..	..	..	1	..	3	..	..	3	1	..	..	6	2
Dysentery	..	1	..	4	1	..	6	..	..	..	1	..	..	..	..
Continued Fever	..	..	..	4	4	3	11	8	3	..	2	..	2	7	1
Erysipelas	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..
Rheumatism	3	..	4	6	2	..	15	5	1	10	..	1	1	1	2
Neuralgic Affections	..	..	..	..	..	..	..	1	..	2	..	1	1	..	..
Constitutional Syphilis	..	..	1	..	..	..	1	2	..	9	2	..	1	2	..
Phthisis	1	1	1	..	..	3	6	3	..	17	..	2	..	2	1
Insanity	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	4	3	8	14	14	5	48	10	..	48	2	5	3	15	5
Pleurisy and Pneumonia	5	..	..	..	..	..	5	2	..	3	1	..	..	..	1
Skin Diseases	3	..	..	..	..	3	6	8	..	14	..	1	..	7	6
Dyspepsia	1	..	..	..	..	..	1	1	1	22	1	1	..	2	..
Accidents and diseases not classified	21	8	21	12	7	13	82	35	28	282	5	14	7	45	4
TOTAL	40	13	35	44	30	31	193	79	33	412	15	27	16	97	24

* Not Vaccinated.

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

f April, 1862.

LFORD.			HULME.			CHORL-TON.	ARD-WICK				
1,329			.... 477.			.. 646. ..	508.	....	....	.....	Area in Statute Acres.
0,967.			.. 68,209. ..			.. 44,850 ..	21739	....	....	.....	Population in 1861.
PUBLIC NSTITUTIONS.			POOR LAW DISTRICTS.								
Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	1	Small-pox
..	..	..	..	..	..	..	..	..	3	3	Chicken-pox
..	..	..	..	..	..	..	..	..	..	3	Measles
..	..	..	..	..	..	..	..	..	..	..	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	..	..	..	..	..	3	..	3	..	27	Whooping-cough
1	..	..	..	..	..	..	..	..	..	1	Croup
3	1	..	..	1	..	..	..	2	..	27	Diarrhœa
..	..	..	..	..	..	..	..	..	..	7	Dysentery
11	3	1	1	..	..	2	1	2	..	55	Continued Fever
..	..	..	..	..	..	..	..	..	1	4	Erysipelas
4	1	1	1	1	..	5	1	1	4	57	Rheumatism
7	..	..	..	1	3	..	..	4	..	21	Neuralgic Affections
..	..	..	..	..	..	1	..	2	1	22	Constitutional Syphilis
4	..	..	..	..	1	2	..	..	1	39	Phthisis
..	..	..	..	..	1	..	..	..	3	7	Insanity
23	6	2	1	4	8	11	3	5	6	213	Bronchitis, Influenza, and Catarrah.
1	..	..	..	..	..	..	..	..	1	14	Pleurisy & Pneumonia.
9	..	..	..	1	..	..	..	1	2	55	Skin Disease.
5	..	2	2	3	..	2	..	6	1	50	Dyspepsia
75	2	4	3	9	2	30	2	20	10	674	Accidents and diseases not classified
143	11	10	8	20	15	56	7	46	33	1280	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, ,, W. H. HUGHES, ,, C. H. BRADDON,
(13) ,, H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
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(22) Mr. H. M. WILLIAMSON.
(23) ,, W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON.
(27) ,, J.V.L. WESTMACOTT.

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bowe.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1	..	..	1	..	2	2	..	..	1	7	7
Whooping-cough	1	1	3	..	1	5	2	..	3	..	16	16
Scarlatina	..	..	1	..	2	..	..	..	..	..	3	3
Diarrhœa	..	..	1	1	..	2	..	1	..	..	5	6
Fever	..	1	1	1	..	2	*1	..	1	..	7	11
Diseases of the Lungs	7	14	1	5	..	10	4	2	14	3	60	67
Other causes	17	5	14	8	15	8	11	6	10	†8	102	132
TOTAL NO. OF DEATHS.	26	21	21	16	18	29	20	9	28	12	200	242
TOTAL NO. OF BIRTHS.	61	42	25	16	19	40	42	24	49	17	335	316

* Typhus. † 1 Inquest.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson,* Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD. Population in 1861, 390,815.

5 Weeks ending 1st February.	4 weeks ending 1st March.	4 Weeks ending 29th March.	TOTAL.	DISEASES.	5 Weeks ending 1st February.	4 Weeks ending 1st. March.	4 Weeks ending 29th March.	TOTAL.
1	..	..	1	.... Small-pox	9	2	1	12
22	6	1	29	.... Chicken-pox	10	7	10	27
73	17	31	121	..... Measles	84	66	41	191
22	21	13	56	.... Scarlatina	14	9	13	36
12	2	7	21	.... Diphtheria	..	2	1	3
53	56	46	155	.. Whooping-cough ..	243	140	97	480
2	5	5	12	..... Croup	5	6	2	13
228	216	204	648	.....Diarrhœa.. ...	112	105	96	313
6	3	4	13	.... Dysentery	12	22	11	45
..	....	..	..	..... Cholera	..	..	..	..
21	21	18	60	.... Erysipelas	33	32	20	85
..	....	1	1	.. Puerperal Fever ..	..	..	..	..
10	26	20	56	..... Insanity	29	40	39	108
1252	1012	924	3188	Bronchitis and Catarrh	1517	1098	957	3572
21	10	19	50	..... Pleurisy	96	89	55	240
44	27	20	91	.... Pneumonia ..				
9	2	7	18	.... Carbuncle	..	....	....	..
4005	3320	3281	10606	Accidents, and all other Diseases	3618	3089	3181	9888
5781	4744	4601	15126	..... TOTAL	5782	4707	4524	15013

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
83, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, APRIL 19, 1862. [No. 90.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F	29·833	29·821	29·866	—	29·837	29·806	28·912
Highest (Unreduced)	30·138	30·170	30·218	—	30·240	30·152	29·244
Lowest (Unreduced)	29·574	29·578	29·638	—	29·618	29·644	28·752
Range	0·564	0·592	0·580	—	0·622	0·508	0·492
Temperature.							
Adopted Mean	42·7	43·1	43·0	41·8	43·2	42·9	40·0
Range for Week	28·0	34·2	35·3	32·8	31·7	32·5	30·4
Daily Range	11·1	12·8	17·5	14·0	15·1	15·6	12·0
Maximum in Shade	56·0	58·0	56·8	54·6	56·0	55·4	52·7
Minimum in Shade	28·0	23·8	21·5	21·8	24·3	22·9	22·3
Maximum in Sun	—	78·2	—	77·4	64·0	69·1	—
Maximum in Sun: Black bulb in Vacuo	—	90·7	93·0	—	—	—	98·0
Minimum on Grass	—	18·0	17·5	22·0	20·0	20·9	20·8
Temperature in Ground at surface	—	39·74	41·58	—	—	—	—
Temperature 6 inches below	—	40·21	41·54	—	—	—	39·20
Temperature 12 inches below	—	41·63	43·75	—	—	—	40·77
Temperature of Evaporation	39·4	39·5	39·1	38·8	39·3	38·7	36·8
Temperature of Dew Point	35·4	35·2	34·4	35·2	34·6	33·7	32·6
Temperature of Air—Dew Point	7·3	7·9	8·6	6·6	8·6	9·2	7·4
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	2·41	2·39	2·32	2·38	2·34	2·25	2·16
Required to Saturate do	0·76	0·82	0·88	0·70	0·88	0·94	0·74
Weight of a cubic foot of Air	550·3	549·8	550·7	552·0	550·0	549·6	536·4
Degree of Humidity (Saturation—1,000)	0·759	0·739	0·717	0·786	0·719	0·708	0·753
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	2·86	2·84	2·75	2·84	2·77	2·67	2·56
Elastic force of Vapour	0·207	0·205	0·199	0·205	0·200	0193	0·185
Clouds (Covered—10 Clear—0)	—	6·4	7·7	—	6·5	6·5	6·6
Prevailing Winds	—	S,SW.	SW,NW.	S,SW.	SW,NW.	S,W.	W,SW,NW.
Rain	—	0·497	0·490	0·310	0·515	0·558	0·530
Days on which it fell	—	5	5	4	6	5	3
Ozonometer.							
Moffat (0—10)	—	2·86	—	2·21	5·21	1·57	3·64
Schonbein (0—10)	—	1·71	—	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·067	0·073	0·078	0·060	0·079	0·083	0·062
Weekly Evaporation	0·469	0·511	0·546	0·420	0·553	0·581	0·434

There were 8 barometric oscillations during the week, the amount being 1·450 inches. There were 2 temperature oscillations, the amount being 21·0°.

The mean temperature of the week was 4·0° below the average of the last thirteen years, and 5·4° below the corresponding week last year.

The mean temperature of the week was the highest at Thelwall and the lowest at Ollerenshaw.

The degree of humidity was the highest at Bowdon and the least at Eccles.

Ozone occurred upon 3 days at Old Trafford, 4 days at Bowdon, 7 days at Thelwall, 4 days at Eccles, and 6 days at Ollerenshaw.

Old Trafford, Manchester,
April 22, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

New Cases of Disease coming under Treatment in Pauper, C

During the Week ending Saturday

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	3	1	..	..	1	5	..	..	..	3	1	..	..	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	3	..	..	..	3	..	..	..	2	..	..	7	..
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diarrhœa	..	1	..	..	1	3	5	1	..	1	..	..	..	2	2
Dysentery	..	1	..	2	2	..	5	..	..	..	..	..	..	..	..
Continued Fever	..	..	3	3	..	1	7	..	2	1	1	2	1	4	..
Erysipelas	1	..	1	..	..	..	2	..	..	..	..	..	..	..	..
Rheumatism	4	..	2	4	..	..	10	7	3	5	1	5	2	1	1
Neuralgic Affections	..	..	..	..	1	..	1	..	..	3	..	..	..	..	..
Constitutional Syphilis	1	..	..	..	..	..	1	..	..	6	2	1	1	..	..
Phthisis	..	1	1	..	..	1	3	4	1	16	3	..	..	1	..
Insanity	..	..	..	..	..	..	..	3	..	3	..	..	3	..	..
Bronchitis, Influenza & Catarrh	2	..	5	10	9	6	32	20	..	25	6	1	1	12	..
Pleurisy and Pneumonia	..	..	3	..	..	..	3	3	..	2	..	..	..	1	..
Skin Diseases	1	..	..	..	1	..	2	9	..	12	..	1	..	6	4
Dyspepsia	1	1	..	..	1	..	3	1	2	13	2	1	1	1	3
Accidents and diseases not classified	9	12	15	7	12	13	68	32	26	215	6	13	7	31	4
TOTAL	19	19	34	26	27	25	150	80	34	302	26	26	17	67	14

ITARY ASSOCIATION.

ublic Institutions of Manchester and adjoining Districts,

April, 1862.

ORD.		HULME.			CHORL-TON.		ARD-WICK				
329		.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.
967.		.. 68,209. ..			.. 44,850 ..		21739	....	....	.....	Population in 1861.
PUBLIC TITUTIONS.		POOR LAW DISTRICTS.									
Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	1	Small-pox
..	..	..	..	..	..	..	..	..	..	..	Chicken-pox
..	..	..	..	..	..	..	..	..	..	9	Measles
..	..	..	..	..	..	..	..	..	..	1	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	Diphtheria
1	..	..	..	1	..	..	1	2	2	19	Whooping-cough
..	..	..	..	..	..	..	..	..	..	1	Croup
1	..	..	3	1	..	2	..	1	..	19	Diarrhœa
1	..	..	..	..	..	..	1	..	..	7	Dysentery
6	1	..	..	..	..	1	..	3	2	35	Continued Fever
..	..	..	..	..	..	..	..	..	..	2	Erysipelas
7	3	..	1	..	..	4	1	1	2	55	Rheumatism
2	..	..	..	..	1	..	..	2	..	10	Neuralgic Affections
2	..	..	..	..	1	1	..	1	1	17	Constitutional Syphilis
6	..	2	1	..	..	1	..	3	3	46	Phthisis
..	..	..	..	..	..	..	..	..	2	16	Insanity
11	9	3	2	6	3	9	4	10	3	164	Bronchitis, Influenza, and Catarrah.
..	..	..	..	..	..	2	..	2	..	13	Pleurisy & Pneumonia.
8	..	..	..	2	..	..	1	1	2	48	Skin Disease.
2	1	1	1	1	..	2	..	4	2	42	Dyspepsia
54	3	2	4	10	2	27	2	21	10	554	Accidents and diseases not classified
101	17	8	12	21	7	49	10	51	29	1059	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Choriton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	2	..	..	1	2	1	..	..	..	6	6
Whooping-cough	3	..	..	..	..	4	4	..	2	1	14	15½
Scarlatina	..	..	..	..	..	..	1	..	..	..	1	2
Diarrhœa	..	2	..	..	..	2	1	..	..	1	6	6
Fever	..	2	2	..	..	..	2	..	..	..	6	11
Diseases of the Lungs	13	9	1	5	..	6	7	7	6	1	55	67
Other causes	13	20	19	9	18	*7	9	6	16	7	124	133
TOTAL No. OF DEATHS.	29	35	22	14	19	21	25	13	24	10	212	240½
TOTAL No. OF BIRTHS.	42	35	17	16	13	26	22	33	43	15	262	317

* 2 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
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1	..	..	1	.... Small-pox	9	2	1	12
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6	3	4	13	.... Dysentery	12	22	11	45
..	....	..	..	..... Cholera	..	..	..	..
21	21	18	60	.... Erysipelas	33	32	20	85
..	....	1	1	.. Puerperal Fever ..	..	..	..	..
10	26	20	56	..... Insanity	29	40	39	108
1252	1012	924	3188	Bronchitis and Catarrh	1517	1098	957	3572
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44	27	20	91	... Pneumonia ..				
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COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, APRIL 26, 1862. [No. 91.

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Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·672	29·677	29·709	——	29·689	29·668	28·789
Highest (Unreduced)	29·974	29·896	29·938	——	29·902	29·859	29·030
Lowest (Unreduced)	29·480	29·332	29 370	——	29·350	29·302	28·620
Range	0·494	0·564	0·568	——	0·552	0·557	0·410
Temperature.							
Adopted Mean	50·7	52·7	52·8	51·4	51·0	51·5	48·8
Range for Week	20·0	27·6	25·8	23·5	26·3	23·9	21·9
Daily Range	11·2	14·7	14·4	15·2	14·3	12·7	12 2
Maximum in Shade	62·0	69·8	67·8	63·9	67·5	64·6	64·0
Minimum in Shade	42·0	42·2	42·0	40·4	41·2	40·7	42·1
Maximum in Sun	——	98·9	——	91·8	79·5	82·4	——
Maximum in Sun: Black bulb in Vacuo	——	111·0	104 0	——	——	——	109·1
Minimum on Grass	——	37·0	38·5	35·7	37·6	39·0	30·9
Temperature in Ground at surface	——	48·24	50·40	——	——	——	——
Temperature 6 inches below	——	47·90	48·94	——	——	——	46·27
Temperature 12 inches below	——	48·15	49·51	——	——	——	46·24
Temperature of Evaporation	48·3	49·1	48·6	48·4	47·3	48·0	46·1
Temperature of Dew Point	45·8	45·5	44·3	44·6	43·4	44·5	43·2
Temperature of Air—Dew Point	4·9	7·2	8·5	6·8	7·6	7·0	5·6
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	3·52	3·46	3·34	3·44	3·19	3·35	3·16
Required to Saturate do	0·65	1·08	1·22	0·84	1·01	0·95	0·72
Weight of a cubic foot of Air	538·0	536·2	535·8	538·1	538·3	537·1	524·1
Degree of Humidity (Saturation—1,000)	0·839	0·771	0·724	0·800	0·758	0·770	0·811
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	4·26	4·22	4·03	4·08	3·89	4·07	3·86
Elastic force of Vapour	0·308	0·305	0·292	0·295	0·281	0·294	0·279
Clouds (Covered—10 Clear—0)	——	8·4	7·4	——	8·2	8·0	9·4
Prevailing Winds	——	S,SW.	SW.	S.	W,SW.		SW.
Rain	——	0·450	0·700	0·550	0·578	0·481	0·700
Days on which it fell	——	5	6	6	6	4	5
Ozonometer.							
Moffat (0—10)	——	3·00	——	5·00	4·07	1·57	6·57
Schonbein (0—10)	——	2·28	——	——	——	——	——
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·062	0·094	0·108	0·084	0·093	0·087	0·066
Weekly Evaporation	0·434	0·658	0·756	0·588	0·651	0·609	0·462

There were 5 barometric oscillations during the week, the amount being 1·552 inches. There were 7 temperature oscillations, the amount being 35·0°.

The mean temperature of the week was 5·6° above the average of the last thirteen years, and 6·6° above the corresponding week last year; and also warmer than any corresponding week during that period.

The mean temperature of the week was the highest at Sale and the lowest at Ollerenshaw.

The degree of humidity was the highest at the Royal Infirmary, and the lowest at Sale; of the country districts, the highest degree of humidity was at Bowdon.

The sudden increase of temperature, during the past week, has been much more marked in the country than in the city, owing to the dense screen of smoke which always overhangs the latter.

Ozone occurred at Old Trafford upon 4 days, Thelwall 6 days, Bowdon 5 days, Eccles 4 days, and Ollerenshaw 7 days.

Old Trafford, Manchester,
April 30, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper, C

During the Week ending Saturda

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	1	2	3	..	..	2	4	1	..	1	4
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	..	1	..	1	2	..	7	..	..	..	9	6
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	..	..	1	1	2	4	1	..	10	1	1	..	10	1
Dysentery	..	..	..	3	..	..	3	..	..	..	..	..	..	..	..
Continued Fever	*2	1	2	1	1	1	8	7	1	..	..	2	1	3	..
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..
Rheumatism	..	3	1	2	3	1	10	14	..	6	1	1	4	1	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	6	..	..	..	..	..
Constitutional Syphilis	..	..	2	1	..	..	3	2	..	11	..	..	..	1	..
Phthisis	..	1	..	1	..	2	4	1	1	27	..	4	..	6	3
Insanity	1	..	..	..	..	..	1	2	..	..	..	1	..	..	..
Bronchitis, Influenza & Catarrh	4	3	9	9	12	10	47	20	..	50	6	10	..	13	2
Pleurisy and Pneumonia	1	..	..	..	..	..	1	..	..	2	1	..	..	4	..
Skin Diseases	..	..	..	..	..	..	..	8	..	20	..	..	..	8	6
Dyspepsia	..	2	..	..	1	..	3	3	..	15	..	..	..	7	..
Accidents and diseases not classified	13	20	6	9	7	15	70	37	47	223	7	22	11	49	7
TOTAL	21	31	20	27	27	33	159	97	49	378	20	43	18	113	29

* 1 Typhus.

ITARY ASSOCIATION.

ublic Institutions of Manchester and adjoining Districts,

f April, 1862.

FORD.			HULME.			CHORL-TON.		ARD-WICK				
,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
),967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC STITUTIONS.			POOR LAW DISTRICTS.									
	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
7	18	19	20	21	22	23	24	25	26	27		
.	..	..	..	..	..	..	..	..	..	..	1	Small-pox
.	..	..	..	..	..	..	..	..	..	1	1	Chicken-pox
.	..	..	..	..	..	..	..	..	1	..	15	Measles
.	..	..	..	..	1	..	..	..	..	..	2	Scarlatina
.	..	.	..	..	..	..	..	..	..	..	..	Diphtheria
.	1	..	..	..	2	1	9	..	2	2	42	Whooping-cough
.	..	..	..	..	..	1	..	..	..	..	1	Croup
.	1	7	1	..	1	..	..	1	1	..	43	Diarrhœa
.	..	..	..	..	..	..	..	..	1	..	4	Dysentery
.	6	..	..	1	4	..	..	..	4	5	42	Continued Fever
.	2	..	..	..	..	..	..	..	..	1	6	Erysipelas
3	3	1	1	1	..	..	6	..	2	2	59	Rheumatism
1	..	..	1	..	..	1	..	..	1	2	12	Neuralgic Affections
2	..	..	..	..	..	..	..	..	..	2	21	Constitutional Syphilis
.	5	..	..	1	2	..	3	..	2	2	61	Phthisis
.	..	..	1	..	..	..	..	..	..	2	7	Insanity
8	19	4	3	1	7	4	11	2	8	..	219	Bronchitis, Influenza, and Catarrah.
.	..	1	..	1	..	..	1	..	1	..	12	Pleurisy & Pneumonia.
1	2	1	1	1	..	1	..	..	2	3	56	Skin Disease.
.	2	..	2	2	..	1	3	..	6	2	46	Dyspepsia
3	98	3	3	3	6	7	34	..	10	6	663	Accidents and diseases not classified
6	139	17	13	11	23	16	67	3	41	30	1313	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,

(8) Mr. M. ROWLAND DAY,
(9) } Mr. W. J. MALLETT,
(10) } ,, W. H. HUGHES,
(11) } ,, C. H. BRADDON,
(12) }
(13) ,, H. RUNCORN,
(14) Dr. WHITEHEAD,

(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL
(18) ,, J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,

(22) Mr. H. M. WILLIAMSON.
(23) ,, W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J. V. L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	.
Measles	..	1	..	1	..	3	1	..	..	..	6	6½
Whooping-cough	..	..	1	2	..	3	3	1	3	..	13	16
Scarlatina	..	..	..	..	1	1	..	..	2	..	4	2
Diarrhœa	1	..	3	..	..	1	..	..	..	..	5	7
Fever	..	..	..	..	..	..	1	†1	..	..	2	10½
Diseases of the Lungs	12	12	3	4	..	9	6	7	11	2	66	64
Other causes	12	21	10	12	14	*12	8	11	14	4	118	132
TOTAL NO. OF DEATHS.	25	34	17	19	15	29	19	20	30	6	214	238
TOTAL NO. OF BIRTHS.	38	29	21	31	21	37	47	32	64	13	333	314

* 3 Inquests. † Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 Weeks ending 1st February.	4 weeks ending 1st March.	4 Weeks ending 29th March.	TOTAL.	DISEASES.	5 Weeks ending 1st February.	4 Weeks ending 1st. March.	4 Weeks ending 29th March.	TOTAL.
1	..	..	1	.... Small-pox	9	2	1	12
22	6	1	29	.... Chicken-pox	10	7	10	27
73	17	31	121	..... Measles	84	66	41	191
22	21	13	56	.... Scarlatina ...	14	9	13	36
12	2	7	21	.... Diphtheria	..	2	1	3
53	56	46	155	.. Whooping-cough ..	243	140	97	480
2	5	5	12	..... Croup	5	6	2	13
228	216	204	648	.....Diarrhœa.. ...	112	105	96	313
6	3	4	13	.... Dysentery	12	22	11	45
..	....	..	..	..... Cholera	..	..	..	..
21	21	18	60	.... Erysipelas	33	32	20	85
..	....	1	1	.. Puerperal Fever ..	..	..	..	..
10	26	20	56	..... Insanity	29	40	39	108
1252	1012	924	3188	Bronchitis and Catarrh	1517	1098	957	3572
21	10	19	50	..... Pleurisy	96	89	55	240
44	27	20	91	... Pneumonia ..				
9	2	7	18	.... Carbuncle	..	....	....	..
4005	3320	3281	10606	Accidents, and all other Diseases	3618	3089	3181	9888
5781	4744	4601	15126	..... TOTAL	5782	4707	4524	15013

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, MAY 3, 1862. [No. 92.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F	29·983	29·991	29·969	—	30·004	29·971	29·223(a)
Highest } Unreduced	30·212	30·226	30·258	—	30·250	30·189	29·380
Lowest } Unreduced	29·856	29·873	29·900	—	29·842	29·828	29·060
Range	0·356	0·353	0·358	—	0·408	0·361	0·320
Temperature.							
Adopted Mean	52·9	54·5	53·2	53·7	52·1	53·9	49·7
Range for Week	33·0	38·0	38·8	41·0	38·7	37·1	29·5
Daily Range	17·4	22·6	25·0	23·0	23·5	20·2	17·8
Maximum in Shade	76·0	76·0	74·8	78·0	73·2	73·8	69·0
Minimum in Shade	43·0	38·0	36·0	37·0	34·5	36·7	39·5
Maximum in Sun	—	97·3	—	95·7	81·3	87·9	—
Maximum in Sun: Black bulb in Vacuo	—	108·4	109·8	—	—	—	109·1
Minimum on Grass	—	32·5	32·0	31·0	31·0	34·0	31·5
Temperature in Ground at surface	—	49·49	52·64	—	—	—	—
Temperature 6 inches below	—	49·27	50·74	—	—	—	48·00
Temperature 12 inches below	—	50·33	52·57	—	—	—	48·86
Temperature of Evaporation	49·3	50·5	48·0	50·6	46·5	48·0	46·6
Temperature of Dew Point	45·7	46·7	42·2	47·6	40·8	42·2	43·3
Temperature of Air—Dew Point	7·2	7·8	11·0	6·1	11·3	11·7	6·4
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	3·50	3·60	3·08	3·71	2·89	3·01	3·19
Required to Saturate do	1·08	1·20	1·46	0·99	1·52	1·63	0·86
Weight of a cubic foot of Air	541·4	541·9	541·2	543·6	542·7	540·3	531·1
Degree of Humidity (Saturation—1,000)	0·773	0·745	0·680	0·794	0·661	0·645	0·790
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	4·25	4·41	3·72	4·55	3·53	3·72	3·87
Elastic force of Vapour	0·307	0·319	0·269	0·329	0·255	0·269	0·280
Clouds (Covered—10 Clear—0)	—	4·1	3·4	—	4·1	5·8	4·7
Prevailing Winds	—	E.	SW.	SW,SE.	S,NW.	E.	W,SE,E.
Rain	—	0·230	0·100	0·240	0·070	0·060	0·106
Days on which it fell	—	2	2	3	1	1	3
Ozonometer.							
Moffat (0—10)	—	0·71	—	2·28	3·64	3·71	4·00
Schonbein (0—10)	—	0·43	—	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·094	0·106	0·137	0·084	0·134	0·147	0·077
Weekly Evaporation	0·658	0·742	0·959	0·588	0·938	1·029	0·539

(a) Uncorrected for temperature.

There were 4 barometric oscillations during the week, the amount being 1·356 inches. There were 5 temperature oscillations, the amount being 26·0°.

The mean temperature of the week was 7·4° above the average of the last thirteen years, and 7·7° above the corresponding week last year; and also warmer than any corresponding week during that period.

The mean temperature of the week was the highest at Old Trafford and the lowest at Ollerenshaw.

The degree of humidity was the highest at Bowdon and the lowest at Eccles, but there appears to have been very great irregularity as regards this element.

Ozone occurred at Old Trafford upon 1 day, Bowdon 3 days, Thelwall 7 days, Eccles 6 days, and Ollerenshaw 7 days.

The fall of rain during the month of April has been as follows:—

	Height above Sea.	Fall in Inches.	Days on which it Fell.
Old Trafford	106	2·717	19
Sale	134	2·640	20
Bowdon	218	2·250	18
Thelwall	96	2·335	20
Eccles	117	2·460	18
Ollerenshaw	808	2·411	16

The observer in each case is responsible for the height of his station.

Old Trafford, Manchester,
May 7, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper

During the Week ending Sat

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childri	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical 1
Small-pox	..	..	..	1	..	..	1	..	..	..	..	..	..	..	.
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Measles	..	..	..	..	..	2	2	..	..	..	..	..	..	2	.
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	2	..	.
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Whooping-cough	1	1	..	..	..	3	5	1	..	..	..	..	..	3	
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Diarrhœa	..	..	1	2	2	..	5	..	..	8	..	..	..	3	
Dysentery	1	..	..	..	..	..	1	1	..	..	..	1	..	..	.
Continued Fever	..	..	5	5	3	..	13	7	2	2	2	..	1	4	.
Erysipelas	..	..	..	..	..	..	..	..	..	7	..	..	..	..	.
Rheumatism	3	1	1	2	..	..	7	6	..	18	2	..	2	..	.
Neuralgic Affections	..	..	..	..	..	..	..	..	..	5	..	..	..	..	
Constitutional Syphilis	1	..	..	..	..	..	1	2	..	14	..	..	..	4	.
Phthisis	..	1	2	1	..	..	4	7	..	26	1	1	..	2	.
Insanity	..	..	1	..	..	1	2	2	..	..	..	..	..	..	.
Bronchitis, Influenza & Catarrh	1	3	9	6	11	6	36	16	2	49	6	3	3	14	
Pleurisy and Pneumonia	..	..	1	..	..	..	1	1	..	..	..	..	..	1	
Skin Diseases	..	..	1	..	..	1	2	5	..	21	..	..	..	1	
Dyspepsia	1	..	..	..	..	..	1	3	..	27	..	..	..	5	2
Accidents and diseases not classified	16	12	15	10	5	6	64	37	31	245	14	13	9	47	8
TOTAL	24	18	36	27	21	19	145	88	35	422	25	18	17	86	25

ANITARY ASSOCIATION.

d Public Institutions of Manchester and adjoining Districts,

ay of May, 1862.

SALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329			477			646		508				Area in Statute Acres.
70,967			68,209			44,850		21739				Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	1	..	2	Small-pox
..	..	..	..	..	..	..	..	..	1	2	3	Chicken-pox
..	2	..	..	..	..	..	..	..	..	..	6	Measles
..	..	..	..	..	..	..	2	..	..	..	4	Scarlatina
..	..	..	..	..	..	..	..	..	..	1	1	Diphtheria
1	..	..	1	..	..	..	4	..	3	..	20	Whooping-cough
..	..	..	1	..	..	..	..	..	..	..	1	Croup
1	..	2	..	2	1	1	4	..	1	1	33	Diarrhœa
..	..	..	..	..	2	3	..	..	..	..	8	Dysentery
..	8	..	..	2	3	..	2	..	2	4	55	Continued Fever
..	..	..	..	..	..	..	..	..	..	..	7	Erysipelas
2	4	1	1	1	2	1	6	..	2	3	60	Rheumatism
..	3	..	..	..	..	..	1	..	..	1	13	Neuralgic Affections
..	..	..	..	..	..	..	..	..	1	1	23	Constitutional Syphilis
3	3	..	1	..	..	..	2	..	..	2	53	Phthisis
..	..	..	..	1	..	..	..	..	..	2	7	Insanity
2	18	5	5	2	7	4	2	3	9	..	194	Bronchitis, Influenza, and Catarrah.
..	..	..	..	..	..	..	..	..	1	..	5	Pleurisy & Pneumonia.
1	7	..	4	..	2	1	2	..	2	2	58	Skin Disease.
1	9	2	..	1	..	4	3	1	5	1	68	Dyspepsia
3	73	4	5	5	4	6	32	3	21	6	645	Accidents and diseases not classified
14	127	14	18	14	21	20	60	7	49	26	1266	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. O FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,

(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, ,, W. H. HUGHES, ,, C. H. BRADDON,
(13) ,, H. RUNCORN,
(14) Dr. WHITEHEAD,

(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL
(18) ,, J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,

(22) Mr. H. M. WILLIAMSON.
(23) ,, W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J. V. L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Average for the last four weeks.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1	..	..	1	..	2	3	..	1	..	8	7
Whooping-cough	2	3	2	1	..	..	1	1	1	1	12	16
Scarlatina	..	..	..	..	..	..	1	..	2	..	3	2
Diarrhœa	2	..	..	..	..	1	1	..	..	1	5	6
Fever	1	..	1	..	..	..	1	*1	1	..	5	7½
Diseases of the Lungs	6	8	2	4	1	7	2	4	15	..	49	61
Other causes	13	15	18	4	8	5	17	7	22	10	119	128
TOTAL NO. OF DEATHS.	25	26	23	10	9	15	26	13	42	12	201	227½
TOTAL NO. OF BIRTHS.	58	33	16	30	31	34	47	40	62	21	372	319

* Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson,* Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD. Population in 1861, 390,815.

4 weeks ending 1st March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.	DISEASES.	4 Weeks ending 1st. March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.
..	..	1	1	.... Small-pox	2	1	3	6
6	1	3	10	.... Chicken-pox	7	10	9	26
17	31	37	85	..... Measles	66	41	31	138
21	13	18	52	.... Scarlatina	9	13	5	27
2	7	1	10	.... Diphtheria	2	1	..	3
56	46	50	152	.. Whooping-cough ..	140	97	128	365
5	5	1	11	..... Croup	6	2	5	13
216	204	172	592	.....Diarrhœa.. ...	105	96	112	313
3	4	2	9	.... Dysentery	22	11	21	54
....	..	..	..	..... Cholera	..	..	..	..
21	18	19	58	.... Erysipelas	32	20	20	72
....	1	1	2	.. Puerperal Fever ..	..	..	..	..
26	20	22	68	..... Insanity	40	39	42	121
1012	924	707	2643	Bronchitis and Catarrh	1098	957	832	2887
10	19	21	50	..... Pleurisy	89	55	54	198
27	20	18	65	... Pneumonia ..				
2	7	7	16	.... Carbuncle	....	....	..	..
3320	3281	3551	10152	Accidents, and all other Diseases	3089	3181	3229	9499
4744	4601	4631	13976	..... TOTAL	4707	4524	4491	13722

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, MAY 10, 1862. [No. 93.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKRETH ESQ	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F	29·664	29·655	29·684	—	29·668	29·644	28·827
Highest (Unreduced)	30·006	29·984	30·022	—	30·030	29·970	29·180
Lowest (Unreduced)	29·472	29·399	29·438	—	29·442	29·372	28·622
Range	0·534	0·585	0·584	—	0·588	0·598	0·558
Temperature.							
Adopted Mean	54·2	55·4	54·5	55·6	53·9	55·3	51·9
Range for Week	25·0	30·3	36·3	29·8	37·3	29·7	28·3
Daily Range	12·1	13·6	17·3	16·7	16·4	14·6	11·1
Maximum in Shade	70·0	75·0	72·8	73·0	71·8	72·6	66·8
Minimum in Shade	45·0	44·7	36·5	43·2	34·5	42·9	38·5
Maximum in Sun	—	97·3	—	98·2	82·3	90·4	—
Maximum in Sun: Black bulb in Vacuo	—	112·7	109·5	—	—	—	106·9
Minimum on Grass	—	43·0	35·4	39·2	39·5	43·0	39·5
Temperature in Ground at surface	—	52·38	54·44	—	—	—	—
Temperature 6 inches below	—	52·18	53·31	—	—	—	49·67
Temperature 12 inches below	—	52·66	54·20	—	—	—	49·87
Temperature of Evaporation	51·1	52·3	51·1	52·8	50·8	51·6	50·4
Temperature of Dew Point	48·1	49·3	47·8	50·2	47·8	48·1	48·9
Temperature of Air—Dew Point	6·1	6·1	6·7	5·4	6·1	7·2	3·0
Hygrometrical condition of the Atmosphere	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	3·81	3·95	3·78	4·08	3·75	3·79	3·93
Required to Saturate do	0·93	0·99	1·02	0·88	0·93	1·14	0·45
Weight of a cubic foot of Air	534·0	532·6	534·1	532·9	534·6	532·6	521·3
Degree of Humidity (Saturation—1,000)	0·794	0·808	0·776	0·828	0·794	0·771	0·895
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	4·77	4·87	4·61	5·03	4·61	4·65	4·78
Elastic force of Vapour	0·345	0·352	0·333	0·364	0·333	0·336	0·346
Clouds (Covered—10 Clear—0)	—	8·5	6·8	—	7·2	7·5	9·2
Prevailing Winds	—	SW.	SW, NW.	SE.	S, SW.	SE, SW.	SE.
Rain	—	1·367	1·420	1·380	1·814	1·249	1·580
Days on which it fell	—	5	5	5	5	7	4
Ozonometer.							
Moffat (0—10)	—	1·00	—	4·57	4·21	1·57	7·07
Schonbein (0—10)	—	0·00	—	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·076	0·087	0·092	0·079	0·083	0·101	0·040
Weekly Evaporation	0·532	0·609	0·644	0·553	0·581	0·707	0·280

There were 6 barometric oscillations during the week, the amount being 1·332 inches. There were 5 temperature oscillations, the amount being 31·6°.

The mean temperature of the week was 6·7° above the average of the last thirteen years, and 12·9° above the corresponding week last year; and also warmer than any corresponding week during the last thirteen years.

The mean temperature was the highest at Bowdon and the lowest at Ollerenshaw.

The degree of humidity was the highest at Ollerenshaw and the lowest at Eccles. A comparison between Ollerenshaw and the other stations would appear to show that the great advance of temperature, and its accompanying less amount of humidity, has been much more marked at low elevations than at considerable ones, such as Ollerenshaw.

There were several very heavy thunder and hail storms during the week.

Ozone occurred at Old Trafford upon 2 days, Bowdon 6 days, Thelwall 7 days, Eccles 4 days, and Ollerenshaw 7 days.

Old Trafford, Manchester,
May 13, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper

During the Week ending Satu

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childri	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical
	1	2	3	4	5	6		7	8	9	10	11	12	13	1
Small-pox	..	1	..	*1	2	..	4	..	1	..	1	..	..	..	.
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
Scarlatina	..	..	..	..	..	..	..	..	..	..	1	..	..	..	.
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Whooping-cough	..	..	..	..	..	1	1	..	..	1	..	..	..	6	
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Diarrhœa.....	..	..	..	1	3	..	4	..	..	1	..	..	..	5	
Dysentery	..	1	..	..	..	..	1	2	..	1	..	..	..	1	.
Continued Fever.....	1	1	2	7	..	1	12	3	2	2	..	..	1	3	
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Rheumatism	..	3	3	2	..	..	8	6	2	18	1	1	3	2	.
Neuralgic Affections	..	..	1	1	..	..	2	..	..	5	..	..	..	..	.
Constitutional Syphilis	..	..	..	1	..	..	1	1	..	7	..	..	..	2	.
Phthisis	1	..	..	..	..	3	4	11	..	25	3	2	..	3	
Insanity	..	..	..	..	..	..	..	..	..	3	..	..	..	..	.
Bronchitis, Influenza & Catarrh	..	4	4	7	9	5	29	19	1	37	7	4	2	9	
Pleurisy and Pneumonia....	..	..	..	..	1	..	1	..	..	1	..	..	2	2	
Skin Diseases.....	..	3	..	2	2	3	10	5	..	19	..	..	..	5	
Dyspepsia	1	2	..	1	..	4	8	4	2	30	2	..	..	3	..
Accidents and diseases not classified.....	12	15	10	9	4	9	59	40	31	313	5	14	7	66	8
TOTAL	15	30	20	32	21	26	144	91	39	463	20	21	15	109	24

* Not vaccinated.

ANITARY ASSOCIATION.

nd Public Institutions of Manchester and adjoining Districts,

day of May, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK				
.. 1,329				.... 477.			.. 646. ..		508	....	...	.....	Area in Statute Acres.
.. 70,967.				.. 68,209. ..			.. 44,850 ..		21739	...	....	....	Population in 1861.
OR AW IS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Stockgate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anncats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
6	17	18	19	20	21	22	23	24	25	26	27		
.	..	..	..	..	..	..	..	..	..	..	..	6	Small-pox
.	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox
.	..	2	..	..	..	1	..	..	..	..	..	6	Measles
.	..	..	..	..	..	..	2	..	..	..	..	3	Scarlatina
.	1	..	..	..	..	..	..	..	..	..	..	1	Diphtheria
.	..	3	..	..	1	4	..	2	..	2	..	24	Whooping-cough
.	..	1	..	..	..	..	..	..	..	..	..	1	Croup
.	..	1	4	..	..	1	..	3	..	..	1	23	Diarrhœa
1	..	1	..	..	..	..	..	..	..	..	..	7	Dysentery
2	..	2	..	..	2	2	..	2	2	1	1	40	Continued Fever
1	1	2	..	..	..	..	..	..	..	..	..	4	Erysipelas
2	1	4	..	..	..	..	1	2	..	4	2	58	Rheumatism
.	..	1	..	1	..	..	1	1	..	..	..	11	Neuralgic Affections
.	..	..	..	..	..	..	..	1	..	3	1	16	Constitutional Syphilis
1	1	4	..	..	..	1	2	4	..	2	2	68	Phthisis
1	2	..	..	..	..	..	..	..	..	..	..	6	Insanity
2	1	12	2	2	7	5	3	6	4	15	3	173	Bronchitis, Influenza, and Catarrah.
.	..	1	..	..	..	..	..	2	..	2	..	12	Pleurisy & Pneumonia.
1	5	2	..	..	..	1	1	2	..	1	2	56	Skin Disease.
.	..	7	2	1	..	2	2	7	..	5	1	76	Dyspepsia
0	3	68	4	6	4	6	5	36	1	20	9	720	Accidents and diseases not classified
1	15	111	12	10	14	23	17	68	7	55	22	1311	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	1	..	..	..	..	..	..	..	..	..	1	1
Measles	..	..	..	..	2	2	..	..	1	..	5	1
Whooping-cough	3	4	2	..	1	2	1	..	2	..	15	..
Scarlatina	..	..	..	1	..	..	..	1	..	..	2	1
Diarrhœa	..	..	..	..	1	1	1	..	..	..	3	3
Fever	.	..	3	..	2	..	1	1	*1	1	9	12
Diseases of the Lungs	9	6	..	5	1	9	3	4	13	2	52	55
Other causes	19	8	20	8	15	8	9	8	31	6	132	115
TOTAL NO. OF DEATHS.	32	18	25	14	22	22	15	14	48	9	219	188
TOTAL NO. OF BIRTHS.	45	35	17	26	18	41	27	33	65	27	334	319

* Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 weeks ending 1st March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.	DISEASES.	4 Weeks ending 1st. March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.
..	..	1	1	.... Small-pox	2	1	3	6
6	1	3	10	.... Chicken-pox ...	7	10	9	26
17	31	37	85	..... Measles	66	41	31	138
21	13	18	52	.... Scarlatina ...	9	13	5	27
2	7	1	10	.... Diphtheria	2	1	..	3
56	46	50	152	.. Whooping-cough ..	140	97	128	365
5	5	1	11	..... Croup	6	2	5	13
216	204	172	592	.....Diarrhœa.. ...	105	96	112	313
3	4	2	9	.... Dysentery	22	11	21	54
....	..	..	..	..... Cholera	..	..	..	..
21	18	19	58	.... Erysipelas	32	20	20	72
....	1	1	2	.. Puerperal Fever ..	..	..	..	..
26	20	22	68	..... Insanity .. .	40	39	42	121
1012	924	707	2643	Bronchitis and Catarrh	1098	957	832	2887
10	19	21	50	..... Pleurisy	89	55	54	198
27	20	18	65	... Pneumonia ..				
2	7	7	16	.... Carbuncle	....	....	..	..
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COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, MAY 17, 1862. [No. 94.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

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Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·763	29·805	29·814	——	29·815	29·783	
Highest (Unreduced)	30·070	30·129	30·142	——	30·156	30·092	
Lowest (Unreduced)	29·540	29·542	29·580	——	29·586	29·524	
Range	0·530	0·587	0·562	——	0·570	0·568	
Temperature.							
Adopted Mean	49·6	51·5	50·5	50·9	50·0	50·6	
Range for Week	24·5	34·3	35·5	33·3	32·1	35·8	
Daily Range	11·6	15·5	18·3	18·9	16·7	17·6	
Maximum in Shade	70·0	74·3	72·0	72·8	70·4	74·2	
Minimum in Shade	45·5	40·0	36·5	39·5	38·3	38·4	
Maximum in Sun	——	96·0	——	98·2	82·0	92·6	
Maximum in Sun: Black bulb in Vacuo	——	121·0	108·5	——	——	——	
Minimum on Grass	——	37·0	36·5	37·8	36·0	35·9	
Temperature in Ground at surface	——	49·53	51·24	——	——	——	
Temperature 6 inches below	——	49·89	51·18	——	——	——	
Temperature 12 inches below	——	51·32	52·85	——	——	——	
Temperature of Evaporation	46·5	47·8	47·2	47·9	46·4	46·8	
Temperature of Dew Point	43·2	44·0	43·7	44·8	42·6	42·8	
Temperature of Air—Dew Point	6·4	7·5	6·8	6·1	7·4	7·8	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·19	3·29	3·29	3·39	3·12	3·18	
Required to Saturate do	0·87	1·21	0·86	0·80	0·98	0·98	
Weight of a cubic foot of Air	541·0	539·9	541·0	540·6	541·6	540·4	
Degree of Humidity (Saturation—1,000)	0·789	0·763	0·758	0·800	0·764	0·758	
	INS.	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	3·86	3·98	3·94	4·11	3·78	3·80	
Elastic force of Vapour	0·279	0·288	0·285	0·297	0·273	0·275	
Clouds (Covered—10 Clear—0)	——	6·1	6·7	——	6·6	7·5	
Prevailing Winds	——	NE.	NE, SW.	NE, NW.	W, E.	NE.	
Rain	——	0·675	0·700	0·510	0·255	0·367	
Days on which it fell	——	4	5	4	3	3	
Ozonometer.							
Moffat (0—10)	——	1·28	——	2·14	2·57	1·71	
Schonbein (0—10)	——	0·00	——	——	——	——	
	INS.	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·077	0·093	0·082	0·076	0·088	0·094	
Weekly Evaporation	0·539	0·651	0·574	0·532	0·616	0·658	

There were 7 barometric oscillations during the week, the amount being 0·987 inches. There were 4 temperature oscillations, the amount being 15·7°.

The mean temperature of the week was 0·6° below the average of the last thirteen years, and 0·3° above the corresponding week last year.

The mean temperature was the highest at Old Trafford and the lowest at the Royal Infirmary.

The degree of humidity was the highest at Bowdon and the lowest at Sale and Eccles.

Ozone occurred at Old Trafford upon 2 days, Bowdon 3 days, Thelwall 7 days, and Eccles 5 days,

Old Trafford, Manchester,
May 21, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Satu

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
DISEASES.	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childre	
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	1	1	..	2	..	..	..	..
Chicken-pox	..	..	..	1	..	..	1	..	..	..	..	..	..	1	..
Measles	..	1	..	1	.	1	3	..	..	..	..	..	..	..	..
Scarlatina	..	..	..	3	1	..	4	2	..	..	..	..	..	..	..
Diphtheria	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Whooping-cough	..	1	..	..	..	6	7	..	..	..	2	..	..	2	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa.....	..	1	..	..	3	..	4	2	..	4	..	..	..	3	3
Dysentery	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..
Continued Fever.....	..	1	..	3	1	..	5	6	2	..	..	2	..	4	..
Erysipelas	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Rheumatism	2	2	2	1	1	..	8	5	4	10	..	1	..	1	..
Neuralgic Affections	..	..	..	..	1	..	1	..	..	2	..	..	..	..	1
Constitutional Syphilis	..	..	..	..	1	1	2	2	1	7	..	..	..	3	..
Phthisis	..	..	..	..	..	..	..	1	..	18	..	..	1	..	1
Insanity	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	..	2	3	2	7	6	20	16	2	20	3	8	..	7	2
Pleurisy and Pneumonia....	2	..	..	..	..	..	2	2	..	1	3	..	1	..	3
Skin Diseases.....	..	3	..	3	..	2	8	9	..	15	..	..	..	1	1
Dyspepsia	..	2	1	..	..	3	6	2	1	12	1	1	..	6	2
Accidents and diseases not classified.....	15	16	8	9	9	17	74	46	34	209	8	20	7	61	3
TOTAL	19	29	14	24	25	36	147	97	45	299	19	32	9	89	18

ANITARY ASSOCIATION.

d Public Institutions of Manchester and adjoining Districts,

lay of May, 1862.

SALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....	....	477.	....	..	646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....	..	68,209.	..	..	44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	4	Small-pox
..	..	..	..	..	..	..	..	..	..	1	3	Chicken-pox
..	3	..	..	..	1	1	..	..	..	..	8	Measles
..	..	..	..	..	..	..	..	..	..	..	6	Scarlatina
..	..	.	..	..	..	..	..	..	..	..	1	Diphtheria
..	9	..	1	1	..	..	..	..	1	1	25	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	..	Croup
1	1	5	..	1	..	..	3	..	2	..	34	Diarrhœa
..	..	..	1	..	2	..	1	..	..	..	6	Dysentery
..	5	..	..	..	..	..	..	..	1	1	26	Continued Fever
..	..	..	..	..	..	..	1	..	..	..	3	Erysipelas
3	4	..	..	..	1	1	3	1	4	2	49	Rheumatism
..	3	..	1	1	..	..	1	..	..	4	14	Neuralgic Affections
..	..	..	1	..	..	1	2	..	3	1	24	Constitutional Syphilis
..	5	..	..	..	..	..	2	..	2	1	31	Phthisis
4	..	..	..	..	..	..	..	..	..	2	9	Insanity
4	16	3	4	4	7	1	6	2	12	..	143	Bronchitis, Influenza, and Catarrah.
..	1	..	..	..	..	..	3	..	..	1	17	Pleurisy & Pneumonia.
1	4	..	1	..	..	1	5	1	1	4	53	Skin Disease.
..	7	..	..	4	5	1	3	2	6	..	61	Dyspepsia
9	73	3	3	4	4	4	33	6	24	4	639	Accidents and diseases not classified
22	131	11	12	15	20	10	63	12	56	22	1156	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) " EVAN THOMAS,
(7) " J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) } Mr. W. J. MALLETT,
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(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
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(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.
(23) " W. B. MIDWOOD,
(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J. V. L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	2	..	2	..	5	2	1	..	3	15	1
Whooping-cough	3	1	3	1	..	5	2	1	3	..	19	No rtrn.
Scarlatina	..	1	..	..	1	..	..	1	..	..	3	1
Diarrhœa	..	..	..	..	..	2	1	1	..	..	4	1
Fever	.	..	..	2	..	..	..	..	*2	..	4	9
Diseases of the Lungs	8	9	..	2	..	8	1	4	4	2	38	50
Other causes	11	4	22	12	13	11	10	6	11	5	105	113
TOTAL NO. OF DEATHS.	22	17	25	19	14	31	16	14	20	10	188	175
TOTAL NO. OF BIRTHS.	39	36	19	22	17	37	39	24	67	13	313	304

* 1 Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 weeks ending 1st March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.	DISEASES.	4 Weeks ending 1st. March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.
..	..	1	1	.... Small-pox	2	1	3	6
6	1	3	10	.... Chicken-pox	7	10	9	26
17	31	37	85	..... Measles	66	41	31	138
21	13	18	52	.... Scarlatina	9	13	5	27
2	7	1	10	.... Diphtheria	2	1	..	3
56	46	50	152	.. Whooping-cough ..	140	97	128	365
5	5	1	11	..... Croup	6	2	5	13
216	204	172	592	.....Diarrhœa.. ...	105	96	112	313
3	4	2	9	.... Dysentery	22	11	21	54
....	..	..	..	..... Cholera	..	..	..	..
21	18	19	58	.... Erysipelas	32	20	20	72
....	1	1	2	.. Puerperal Fever ..	..	..	..	..
26	20	22	68	..... Insanity	40	39	42	121
1012	924	707	2643	Bronchitis and Catarrh	1098	957	832	2887
10	19	21	50	..... Pleurisy	89	55	54	198
27	20	18	65	... Pneumonia ..				
2	7	7	16	.... Carbuncle	....	....	..	..
3320	3281	3551	10152	Accidents, and all other Diseases	3089	3181	3229	9499
4744	4601	4631	13976	..... TOTAL	4707	4524	4491	13722

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, MAY 24, 1862. [No. 95.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKRETH, ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F	29·632	29·658	29·685	—	29·674	29·650	
Highest (Unreduced)	30·080	30·096	30·112	—	30·114	30·070	
Lowest (Unreduced)	29·414	29·366	29·470	—	29·426	29·374	
Range	0·666	0·730	0·642	—	0·688	0·696	
Temperature.							
Adopted Mean	54·0	55·7	55·0	56·7	54·6	54·7	
Range for Week	28·0	37·0	35·6	37·8	34·6	37·2	
Daily Range	12·9	20·0	21·9	26·0	18·7	20·4	
Maximum in Shade	71·0	75·0	74·3	75·0	72·8	74·2	
Minimum in Shade	43·0	38·0	38·7	37·2	38·2	37·0	
Maximum in Sun	—	96·0	—	92·8	82·5	92·9	
Maximum in Sun: Black bulb in Vacuo	—	119·0	109·2	—	—	—	
Minimum on Grass	—	37·0	34·2	36·0	35·0	34·8	
Temperature in Ground at surface	—	52·64	54·85	—	—	—	
Temperature 6 inches below	—	52·53	53·75	—	—	—	
Temperature 12 inches below	—	53·49	55·55	—	—	—	
Temperature of Evaporation	50·7	51·9	50·4	53·3	50·3	49·0	
Temperature of Dew Point	47·5	48·3	46·0	50·1	46·2	43·5	
Temperature of Air—Dew Point	6·5	7·4	9·0	6·6	8·4	11·2	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·71	3·81	3·52	4·05	3·53	3·23	
Required to Saturate do	0·99	1·16	1·42	1·09	1·29	1·61	
Weight of a cubic foot of Air	533·7	532·4	533·7	531·7	534·0	533·6	
Degree of Humidity (Saturation—1,000)	0·782	0·769	0·720	0·786	0·728	0·655	
	INS.	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·01	4·69	4·30	5·01	4·33	3·91	
Elastic force of Vapour	0·329	0·339	0·311	0·362	0·313	0·283	
Clouds (Covered—10 Clear—0)	—	6·0	5·5	—	6·8	7·9	
Prevailing Winds	—	S, SW.	SW.	S, SW.	S, SW.	S, SW.	
Rain	—	0·448	0·390	0·600	0·541	0·598	
Days on which it fell	—	4	4	4	4	5	
Ozonometer.							
Moffat (0—10)	—	2·86	—	5·43	4·57	3·28	
Schonbein (0—10)	—	0·28	—	—	—	—	
	INS.	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·089	0·105	0·122	0·099	0·114	0·145	
Weekly Evaporation	0·623	0·735	0·854	0·693	0·798	1·015	

There were 4 barometric oscillations during the week, the amount being 1·483 inches. There were 3 temperature oscillations, the amount being 28·3°.

The mean temperature of the week was 1·1° below the average of the last thirteen years, and 0·2° above the corresponding week last year.

The mean temperature was the highest at Bowdon and the lowest at the Royal Infirmary.

The degree of humidity was the highest at Bowdon and the lowest at Eccles.

Ozone occurred at Old Trafford upon 3 days, Bowdon 4 days, Eccles 6 days, and Thelwall 7 days.

Old Trafford, Manchester,
May 27, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Satur

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	1	..	..	..	1	..	..	..	..	..	..	2	2
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	1	..	..	..	..	1	..	..	..	3	..	..	3	7
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa.....	..	2	..	..	..	1	3	1	..	6	..	..	..	4	7
Dysentery	1	1	..	..	..	..	2	1	..	2	..	..	..	1	..
Continued Fever.....	..	..	6	6	4	5	21	11	1	..	..	4	3	1	..
Erysipelas	..	..	..	..	..	..	..	..	..	3	..	..	1	..	..
Rheumatism	2	2	3	..	2	..	9	6	1	22	1	3	..	1	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	8	..	..	..	..	2
Constitutional Syphilis	..	..	..	..	..	1	1	..	..	12	1	..	1	1	..
Phthisis	..	2	2	2	..	2	8	1	1	30	4	2	2	1	..
Insanity	..	1	..	..	..	1	2	5	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	..	1	4	7	7	6	25	12	1	75	3	2	2	13	4
Pleurisy and Pneumonia....	..	..	..	..	..	..	..	3	1	..	..	..	2	..	..
Skin Diseases.....	..	..	..	1	2	..	3	5	..	14	..	..	..	3	8
Dyspepsia	..	2	1	2	..	..	5	6	..	34	..	..	..	4	..
Accidents and diseases not classified.....	12	18	8	8	9	9	64	35	44	268	10	18	5	50	2
TOTAL	15	30	25	26	24	25	145	86	49	474	22	29	16	84	32

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

ay of May, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	.....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	..	Small-pox
..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox
..	..	..	..	..	..	..	1	..	..	..	7	Measles
..	..	..	..	..	..	..	..	..	..	..	..	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	2	..	..	..	2	..	3	1	1	..	23	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	..	Croup
..	2	2	..	..	..	..	2	..	3	..	33	Diarrhœa
..	..	..	..	..	2	..	..	..	..	1	9	Dysentery
..	6	..	1	..	1	1	..	1	..	1	57	Continued Fever
..	..	..	..	..	..	..	..	..	..	..	4	Erysipelas
1	6	1	..	..	1	..	3	..	3	3	61	Rheumatism
..	3	..	..	..	..	2	1	..	..	5	21	Neuralgic Affections
..	..	..	..	..	..	1	..	..	3	1	21	Constitutional Syphilis
..	6	..	1	2	..	3	3	..	2	4	70	Phthisis
1	..	..	1	1	..	..	..	..	..	4	14	Insanity
3	14	5	2	3	7	1	7	3	14	3	205	Bronchitis, Influenza, and Catarrah.
..	1	..	..	..	..	..	1	..	..	..	8	Pleurisy & Pneumonia.
2	3	..	..	1	..	..	1	..	1	..	41	Skin Disease.
..	8	..	..	3	2	..	3	..	7	6	83	Dyspepsia
3	50	2	2	2	6	3	24	6	26	4	633	Accidents and diseases not classified
10	101	10	7	12	21	11	49	11	60	32	1290	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	1	..	1	..	..	1	..	..	1	4	1
Whooping-cough	1	1	..	..	..	..	4	..	1	1	8	No rtrn.
Scarlatina	..	2	1	1	..	..	..	1	..	..	5	1
Diarrhœa	..	1	..	..	..	1	..	..	2	..	4	3
Fever	.	..	1	..	*2	..	*1	1	1	..	6	2
Diseases of the Lungs	8	2	1	5	..	7	4	4	13	1	45	54
Other causes	14	7	18	5	9	†9	13	8	22	7	112	80
TOTAL NO. OF DEATHS.	23	14	21	12	11	17	23	14	39	10	184	141
TOTAL NO. OF BIRTHS.	59	36	16	18	22	37	25	31	51	22	317	235

* 1 Typhus. † 3 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 weeks ending 1st March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.	DISEASES.	4 Weeks ending 1st. March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.
..	..	1	1	.... Small-pox	2	1	3	6
6	1	3	10	.... Chicken-pox	7	10	9	26
17	31	37	85	..... Measles	66	41	31	138
21	13	18	52	.... Scarlatina	9	13	5	27
2	7	1	10	.... Diphtheria	2	1	..	3
56	46	50	152	.. Whooping-cough ..	140	97	128	365
5	5	1	11	..... Croup	6	2	5	13
216	204	172	592	.....Diarrhœa.. ...	105	96	112	313
3	4	2	9	.... Dysentery	22	11	21	54
....	..	..	..	..... Cholera	..	..	..	..
21	18	19	58	.... Erysipelas	32	20	20	72
....	1	1	2	.. Puerperal Fever ..	..	..	..	..
26	20	22	68	..... Insanity	40	39	42	121
1012	924	707	2643	Bronchitis and Catarrh	1098	957	832	2887
10	19	21	50	..... Pleurisy	89	55	54	198
27	20	18	65	... Pneumonia ..				
2	7	7	16	.... Carbuncle	....	....	..	..
3320	3281	3551	10152	Accidents, and all other Diseases	3089	3181	3229	9499
4744	4601	4631	13976	..... TOTAL	4707	4524	4491	13722

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate.

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, MAY 31, 1862. [No. 96.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·713	29·728	29·760	—	29·752	29·718	28·983
Highest (Unreduced)	29·974	30·047	30·008	—	30·082	30·026	29·160
Lowest (Unreduced)	29·476	29·418	29 510	—	29·500	29·448	28·710
Range	0·498	0·629	0·498	—	0·582	0·578	0·450
Temperature.							
Adopted Mean	53·9	55·9	55·9	56·5	54·5	54·8	52·6
Range for Week	21·0	25·8	26·3	31·5	26·8	25·2	23·5
Daily Range	8·4	13·7	15·2	18·8	12·8	13·2	11·7
Maximum in Shade	68·0	71·8	70·5	75·5	71·8	70·3	66·6
Minimum in Shade	47·0	46·0	44·2	44·0	45·0	45·1	43·1
Maximum in Sun	—	89·0	—	94·5	82·6	85·4	—
Maximum in Sun: Black bulb in Vacuo	—	102·0	100·5	—	—	—	107·1
Minimum on Grass	—	45·0	40·2	39·0	43·0	45·1	45·0
Temperature in Ground at surface	—	53·75	55·58	—	—	—	—
Temperature 6 inches below	—	53·94	55·70	—	—	—	52·27
Temperature 12 inches below	—	54·68	56·68	—	—	—	52·90
Temperature of Evaporation	51·2	53·2	51·8	53·7	52·0	51·9	51·5
Temperature of Dew Point	48·6	50·6	47·9	51·1	49·6	49·1	50·4
Temperature of Air—Dew Point	5·3	5·3	8·0	5·4	4·9	5·7	2·2
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	3·87	4·17	3·77	4·21	4·00	3·99	4·13
Required to Saturate do	0·81	0·82	1·22	0·89	0·80	0·87	0·33
Weight of a cubic foot of Air	535·2	533·2	534·2	532·6	535·0	534·3	523·2
Degree of Humidity (Saturation—1,000)	0·820	0·837	0·753	0·822	0·830	0·806	0·929
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	4·74	5·10	4·62	5·19	4·92	4·83	5·06
Elastic force of Vapour	0·343	0·369	0·334	0·375	0·356	0·349	0·366
Clouds (Covered—10 Clear—0)	—	6·4	6·6	—	8·8	8·5	9·5
Prevailing Winds	—	SW, SE.	SW.	SW, NW.	W, NW.	W, E.	W, SW.
Rain	—	1·890	1·720	1·450	1·461	1·546	1·265
Days on which it fell	—	6	7	7	7	5	5
Ozonometer.							
Moffat (0—10)	—	2·57	—	5·43	4·14	2·28	7·00
Schonbein (0—10)	—	2·00	—	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·073	0·078	0·113	0·082	0·069	0·081	0·031
Weekly Evaporation	0·511	0·546	0·791	0·574	0·483	0·567	0·217

There were 5 barometric oscillations during the week, the amount being 1·613 inches. There were 5 temperature oscillations, the amount being 28·2°.

The mean temperature of the week was 0·1° above the average of the last thirteen years, and 2·0° above the corresponding week last year.

The mean temperature was the highest at Bowdon and the lowest at Ollerenshaw.

The degree of humidity was the highest at Ollerenshaw and the lowest at Sale.

As regards humidity, both Sale and Ollerenshaw appear, during the past week, to have been abnormal as compared with the other stations.

Ozone occurred at Old Trafford upon 4 days, Bowdon 5 days, Thelwall 7 days, Eccles 5 days, and Ollerenshaw 7 days.

The fall of rain during the month of May has been as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	4·470	20
Sale	4·310	22
Bowdon	4·150	22
Thelwall	4·141	20
Eccles	3·820	21

Old Trafford, Manchester,
June 4, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper, C

During the Week ending Saturd

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	1	..	..	3	..	..		..	..	..	..	..	..	2	..
Measles	..	..	..	..	..	..	..	..	..	3	..	1	..	6	1
Scarlatina	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Whooping-cough	3	1	..	..	4	1	9	..	..	..	..	..	..	3	1
Croup	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Diarrhœa	..	..	3	..	1	..	4	..	..	..	1	..	..	4	3
Dysentery	..	..	..	..	..	..	..	2	..	2	..	..	..	1	..
Continued Fever	..	1	..	4	..	5	10	4	1	..	1	..	1	4	..
Erysipelas	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..
Rheumatism	3	2	3	3	..	..	11	3	4	13	..	1	2	2	2
Neuralgic Affections	..	..	..	..	1	..	1	..	..	9	..	..	..	..	..
Constitutional Syphilis	1	..	..	..	..	1	2	3	1	8	1	..	..	..	..
Phthisis	1	..	1	..	1	5	8	4	..	17	2	1	1	1	..
Insanity	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	..	3	5	7	3	5	23	11	1	57	6	1	2	11	4
Pleurisy and Pneumonia	..	..	1	..	..	1	2	2	..	9	..	1	..	2	..
Skin Diseases	..	..	..	..	2	1	3	8	..	20	..	..	1	1	4
Dyspepsia	1	1	..	..	3	1	6	3	1	27	..	..	..	6	1
Accidents and diseases not classified	9	13	8	15	10	15	70	38	31	267	6	13	5	44	3
TOTAL	19	22	21	32	26	37	157	79	40	435	17	18	12	87	19

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

y of May, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....		.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209. ..			.. 44,850 ..		21739	....	....	....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anncats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	..	Small-pox
..	..	..	..	..	..	..	..	..	..	..	6	Chicken-pox
..	..	..	..	..	1	..	..	..	1	..	13	Measles
..	..	..	..	..	..	..	2	..	..	1	5	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	1	Diphtheria
..	2	..	..	..	1	..	3	..	1	..	20	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	1	Croup
2	1	1	..	..	..	..	1	..	4	4	29	Diarrhœa
..	..	..	..	..	..	..	..	..	..	..	5	Dysentery
1	5	..	1	..	2	..	..	..	..	1	34	Continued Fever
..	1	..	..	..	..	1	..	..	..	1	6	Erysipelas
..	1	..	..	1	2	1	3	1	2	2	53	Rheumatism
..	1	..	..	1	..	..	1	..	2	3	18	Neuralgic Affections
1	..	..	..	..	..	..	..	..	..	1	18	Constitutional Syphilis
..	3	..	1	1	..	..	1	1	1	2	44	Phthisis
1	..	..	..	1	..	..	..	1	..	2	7	Insanity
1	15	6	2	6	7	2	4	2	10	..	176	Bronchitis, Influenza, and Catarrah.
..	..	..	..	..	..	..	..	..	..	..	16	Pleurisy & Pneumonia.
..	2	..	..	2	..	..	1	..	1	3	46	Skin Disease.
..	9	1	2	..	..	..	2	..	6	2	68	Dyspepsia
8	56	5	1	4	4	6	23	2	30	4	631	Accidents and diseases not classified
14	96	13	7	16	17	10	41	7	58	26	1197	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) " EVAN THOMAS,
(7) " J. BROADBENT,

(8) Mr. M. ROWLAND DAY,
(9) } Mr. W. J. MALLETT,
(10) } " W. H. HUGHES,
(11) } " C. H. BRADDON,
(12) }
(13) " H. RUNCORN,
(14) Dr. WHITEHEAD,

(15) Mr. W. GOLLAND,
(16) " J. TEALE,
(17) " T. F. BROWNBILL
(18) " J. O. BRADBURY,
(19) " W. B. STOTT,
(20) " T. G. RICHMOND,
(21) Dr. ALEX. WILSON,

(22) Mr. H. M. WILLIAMSON.
(23) " W. B. MIDWOOD,
(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnship., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	1	..	..	..	..	..	..	..	..	..	1	..
Measles	..	4	..	..	..	1	1	..	..	..	6	5
Whooping-cough	1	2	..	..	2	2	1	3	1	..	12	No rtrn.
Scarlatina	..	1	..	..	2	..	..	1	1	..	5	2
Diarrhœa	..	..	..	.	..	2	..	..	3	..	5	9
Fever	1	1	1	..	..	..	1	..	..	..	4	4
Diseases of the Lungs	8	4	2	..	..	6	9	8	8	..	45	50
Other causes	9	9	40	11	15	3	11	9	10	3	120	124
TOTAL NO. OF DEATHS.	20	21	43	11	19	14	23	21	23	3	198	194
TOTAL NO. OF BIRTHS.	37	43	17	17	12	33	17	17	62	17	272	390

Monthly Return of New Cases of Disease coming under Treatmen

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 weeks ending 1st March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.	DISEASES.	4 Weeks ending 1st. March.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	TOTAL.
..	..	1	1	.... Small-pox	2	1	3	6
6	1	3	10	.... Chicken-pox	7	10	9	26
17	31	37	85	..... Measles	66	41	31	138
21	13	18	52	.... Scarlatina	9	13	5	27
2	7	1	10	.... Diphtheria	2	1	..	3
56	46	50	152	.. Whooping-cough ..	140	97	128	365
5	5	1	11	..... Croup	6	2	5	13
216	204	172	592	.....Diarrhœa.. ...	105	96	112	313
3	4	2	9	.... Dysentery	22	11	21	54
....	..	..	..	..... Cholera	..	..	..	..
21	18	19	58	.... Erysipelas	32	20	20	72
....	1	1	2	.. Puerperal Fever ..	..	..	..	..
26	20	22	68	..... Insanity ...	40	39	42	121
1012	924	707	2643	Bronchitis and Catarrh	1098	957	832	2887
10	19	21	50	..... Pleurisy	89	55	54	198
27	20	18	65	.. Pneumonia ..				
2	7	7	16	.... Carbuncle	....	....	..	..
3320	3281	3551	10152	Accidents, and all other Diseases	3089	3181	3229	9499
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WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, JUNE 7, 1862. [No. 97.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

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Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·712	29·726	29·748	—	29·759	29·708	28·906
Highest (Unreduced)	30·026	30·032	30·042	—	30·104	29·998	29·220
Lowest (Unreduced)	29·430	29·278	29·300	—	29·320	29·264	28·602
Range	0·596	0·754	0·742	—	0·784	0·734	0·618
Temperature.							
Adopted Mean	54·7	56·5	56·2	56·1	55·1	56·2	53·6
Range for Week	22·0	32·0	35·3	32·4	27·4	32·6	29·2
Daily Range	12·3	19·0	18·0	17·0	17·5	19·0	15·8
Maximum in Shade	69·0	74·8	74·3	73·2	69·0	73·0	70·2
Minimum in Shade	47·0	42·8	39·0	40·8	41·6	40·4	41·0
Maximum in Sun	—	98·0	—	94·5	82·0	94·5	—
Maximum in Sun: Black bulb in Vacuo	—	111·0	107·5	—	—	—	110·1
Minimum on Grass	—	33·8	39·0	37·9	39·0	39·1	40·5
Temperature in Ground at surface	—	53·64	55·64	—	—	—	—
Temperature 6 inches below	—	55·87	55·01	—	—	—	52·68
Temperature 12 inches below	—	55·13	56·91	—	—	—	53·67
Temperature of Evaporation	51·5	53·7	51·3	52·3	51·4	49·8	51·0
Temperature of Dew Point	48·4	51·1	46·7	48·7	47·9	42·4	48·5
Temperature of Air—Dew Point	6·3	5·4	9·5	7·4	7·2	13·8	5·1
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	3·84	4·21	3·54	3·88	3·77	3·24	3·84
Required to Saturate do	0·51	0·89	1·47	1·14	1·14	1·80	0·78
Weight of a cubic foot of Air	534·2	532·6	533·7	533·6	534·9	533·1	521·0
Degree of Humidity (Saturation—1,000)	0·788	0·822	0·705	0·763	0·769	0·632	0·824
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	4·70	5·18	4·41	4·76	4·62	3·75	4·73
Elastic force of Vapour	0·340	0·375	0·319	0·344	0·334	0·271	0·342
Clouds (Covered—10 Clear—0)	—	5·5	5·7	—	5·3	7·0	6·4
Prevailing Winds	—	S,SW.	SW.	SW,SE.	NW,SW.	S,SW.	SW.
Rain	—	0·435	0·490	0·470	0·440	0·426	0·490
Days on which it fell	—	4	4	4	4	5	3
Ozonometer.							
Moffat (0—10)	—	3·00	—	2·28	3·43	3·43	7·00
Schonbein (0—10)	—	2·00	—	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·088	0·082	0·134	0·107	0·100	0·182	0·070
Weekly Evaporation	0·616	0·574	0·938	0·749	0·700	1·274	0·490

There were 6 barometric oscillations during the week, the amount being 1·465 inches. There were 5 temperature oscillations, the amount being 20·7°.

The mean temperature of the week was 0·5° above the average of the last thirteen years, and 2·5° above the corresponding week last year.

The mean temperature was the highest at Old Trafford and the lowest at Sale.

The degree of humidity was the highest at Ollerenshaw and the lowest at Eccles; the latter station appears to have been excessively dry as compared with the other stations.

Ozone occurred at Old Trafford upon 4 days, Bowdon 4 days, Thelwall 6 days, Eccles 6 days, and Ollerenshaw 7 days.

Winandermere,
June 10, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper

During the Week ending Sa

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
DISEASES.	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childri	
	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical 14
Small-pox	..	..	..	3	2	..	5	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1	..	..	..	..	3	4	..	..	..	..	..	..	5	..
Scarlatina	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	1	..	..	1	..	..	4	..	..	..	3	4
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diarrhœa	..	..	1	4	..	1	6	1	..	2	1	1	..	1	6
Dysentery	..	..	..	1	..	..	1	..	..	3	..	..	..	..	..
Continued Fever	1	..	1	4	2	..	8	3	6	..	5	2	1	4	2
Erysipelas	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Rheumatism	1	5	..	..	..	1	7	5	..	7	2	1	2	..	1
Neuralgic Affections	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
Constitutional Syphilis	..	..	..	..	..	1	1	6	..	6	..	..	..	1	..
Phthisis	1	..	..	..	..	1	2	1	..	18	1	..	2	2	..
Insanity	..	1	..	..	..	..	1	2	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	1	1	7	4	5	4	22	7	..	20	4	5	3	8	3
Pleurisy and Pneumonia	..	..	..	..	..	..	..	1	..	1	2	..	2	..	..
Skin Diseases	..	3	..	..	1	..	4	2	..	14	..	..	..	4	..
Dyspepsia	2	..	..	1	1	2	6	3	..	11	..	..	..	1	2
Accidents and diseases not classified	6	16	9	7	12	9	59	41	26	226	5	14	6	40	6
TOTAL	13	26	18	25	23	24	129	73	32	314	20	23	16	70	24

ANITARY ASSOCIATION.

l Public Institutions of Manchester and adjoining Districts,

ay of June, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....	....	477.	....	..	646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....	..	68,209.	..	..	44,850	..	21739	....	....	....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	5	Small-pox
..	..	..	..	..	..	..	1	..	..	1	2	Chicken-pox
..	2	..	..	1	..	2	..	..	..	..	14	Measles
..	1	..	..	..	..	..	..	..	..	..	2	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	1	Diphtheria
..	3	..	..	..	..	..	3	..	..	..	18	Whooping-cough
..	..	..	..	..	..	..	1	..	..	..	2	Croup
1	4	4	..	1	..	..	4	..	..	2	38	Diarrhœa
..	..	..	..	..	..	1	..	..	..	..	5	Dysentery
..	7	..	..	..	..	..	1	1	2	2	48	Continued Fever
..	..	..	..	..	..	..	..	..	..	1	2	Erysipelas
1	2	2	..	1	1	1	4	1	3	1	42	Rheumatism
..	3	..	..	..	..	..	1	..	2	1	9	Neuralgic Affections
2	..	..	..	..	..	..	1	..	1	1	20	Constitutional Syphilis
1	7	..	1	..	..	..	2	..	2	2	41	Phthisis
..	..	..	..	..	..	..	..	..	..	2	5	Insanity
2	11	4	5	2	1	3	5	2	12	4	130	Bronchitis, Influenza, and Catarrah.
..	..	..	..	..	..	..	2	..	1	..	9	Pleurisy & Pneumonia.
1	6	..	..	1	..	..	1	..	1	2	37	Skin Disease.
1	1	..	4	1	1	..	3	..	8	2	45	Dyspepsia
6	51	2	5	4	3	1	32	4	34	7	584	Accidents and diseases not classified
15	98	12	15	11	6	8	61	8	66	28	1059	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
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(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, " W. H. HUGHES, " C. H. BRADDON,
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(27) " J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	1
Measles	..	2	..	..	..	2	..	..	1	1	6	1
Whooping-cough	1	3	1	1	..	3	2	1	3	..	15	No rtrn.
Scarlatina	..	1	..	..	1	..	..	..	..	..	2	3
Diarrhœa	..	..	1	1	..	2	..	..	1	..	5	4
Fever	2	2	..	..	2	..	1	..	..	1	8	3
Diseases of the Lungs	3	5	1	2	..	7	6	2	12	3	41	56
Other causes	12	5	20	..	19	15	10	8	*18	2	109	103
TOTAL NO. OF DEATHS.	18	18	23	4	22	29	19	11	35	7	186	171
TOTAL NO. OF BIRTHS.	35	28	19	13	17	37	28	29	65	20	291	366

* 12 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 29th March.	4 Weeks ending 26th April.	5 weeks ending 31st May.	TOTAL.	DISEASES.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	5 Weeks ending 31st. May.	TOTAL.
..	1	2	3	.... Small-pox	1	3	12	16
1	3	18	22	.... Chicken-pox	10	9	12	31
31	37	71	139	..... Measles	41	31	40	112
13	18	17	48	.... Scarlatina	13	5	18	36
7	1	3	11	.... Diphtheria	1	..	4	5
46	50	67	163	.. Whooping-cough ..	97	128	112	337
5	1	2	8	..... Croup	2	5	3	10
204	172	331	707	.....Diarrhœa.. ...	96	112	152	360
4	2	3	9	.... Dysentery	11	21	35	67
..	..	....	..	..... Cholera	..	..	..	..
18	19	20	57	.... Erysipelas	20	20	24	64
1	1	1	3	.. Puerperal Fever ..	..	..	..	..
20	22	18	60	..... Insanity	39	42	43	124
924	707	561	2192	Bronchitis and Catarrh	957	832	891	2680
19	21	18	58	..... Pleurisy .... }	55	54	58	167
20	18	23	61	.. Pneumonia .. }				
7	7	5	19	.... Carbuncle	....	..	....	..
3281	3551	4462	11294	{ Accidents, and all other Diseases }	3181	3229	4323	10733
4601	4631	5622	14854	..... TOTAL	4524	4491	5727	14742

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, JUNE 14, 1862. [No. 98.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.			INS.	INS.	INS.	INS.	
Mean @ 32° F.			29·473	—	29·473	29·434	
Highest (Unreduced)			29·930	—	29·944	29·874	
Lowest (Unreduced)			29·096	—	29·044	28·958	
Range			0·834	—	0·900	0·916	
Temperature.							
Adopted Mean			54·0	54·9	53·6	53·7	
Range for Week			26·0	28·5	24·8	25·2	
Daily Range			15·3	18·6	14·9	15·7	
Maximum in Shade			66·0	68·5	64·8	64·7	
Minimum in Shade			40·0	40·0	40·0	39·5	
Maximum in Sun			—	98·2	76·0	81·2	
Maximum in Sun: Black bulb in Vacuo			102·0	—	—	—	
Minimum on Grass			37·8	38·2	38·3	37·4	
Temperature in Ground at surface			54·11	—	—	—	
Temperature 6 inches below			54·25	—	—	—	
Temperature 12 inches below			55·67	—	—	—	
Temperature of Evaporation			51·0	52·0	50·2	50·5	
Temperature of Dew Point			48·1	49·2	46·9	47·4	
Temperature of Air—Dew Point			5·9	5·7	6·7	6·3	
Hygrometrical condition of the Atmosphere.							
			GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air			3·80	3·92	3·60	3·68	
Required to Saturate do			0·90	0·96	1·02	0·96	
Weight of a cubic foot of Air			530·9	529·5	531·3	530·5	
Degree of Humidity (Saturation—1,000)			0·800	0·806	0·776	0·788	
			INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere			4·62	4·85	5·03	4·54	
Elastic force of Vapour			0·334	0·351	0·364	0·328	
Clouds (Covered—10 Clear—0)			6·7	—	8·0	7·6	
Prevailing Winds			SW.	SW.	SE, SW.	SE, SW.	
Rain			1·020	0·760	1·141	1·376	
Days on which it fell			6	7	5	7	
Ozonometer.							
Moffat (0—10)			—	7·71	6·57	2·87	
Schonbein (0—10)			—	—	—	—	
			INS.	INS.	INS.	INS.	
Daily Evaporation			0·084	0·080	0·048	0·085	
Weekly Evaporation			0·588	0·560	0·336	0·595	

NO RETURN. NO RETURN. NO RETURN.

The mean temperature of the past week was 3·9° below the average of the last thirteen years, and 7·6° below the corresponding week last year; the past week was also colder than any corresponding week during the last thirteen years.

Ozone occurred upon 7 days at Bowdon and Thelwall, and upon 6 days at Eccles.

Thunder and lightning, accompanied by heavy hail showers and rain, occurred at most of the stations upon several days during the week, especially upon the 8th, 9th, and 11th.

In addition to the low temperature, the mean barometer reading has been 0·320 inches below the average of the season, and accompanied by a very great depression upon the 12th.

Old Trafford, Manchester,
June 18, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Satu

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	..	..	..	..	*1	1	1	2	..	2	1	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1	..	..	1	..	..	2	..	..	..	..	1	..	1	..
Scarlatina	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	+1	1	..	..	..	..	..	..	..	..
Whooping-cough	1	..	..	..	2	2	5	..	..	..	..	..	..	1	2
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa.....	..	..	..	1	..	1	2	..	..	1	..	..	..	6	1
Dysentery	..	1	..	..	1	..	2	..	..	..	..	..	..	..	1
Continued Fever.....	..	..	2	2	1	..	5	9	2	..	..	..	..	4	..
Erysipelas	..	..	..	2	..	..	2	1	..	2	..	..	..	..	..
Rheumatism	1	..	1	1	..	..	3	2	3	7	1	..	..	1	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Constitutional Syphilis	1	..	..	..	..	1	2	1	..	4	..	..	..	..	2
Phthisis	..	..	..	..	..	2	2	1	..	9	1	3	..	2	1
Insanity	..	1	..	..	..	..	1	4	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	..	..	4	1	7	5	17	7	1	25	2	1	..	4	2
Pleurisy and Pneumonia....	..	..	1	..	..	..	1	1	..	..	..	..	..	..	..
Skin Diseases.....	1	1	..	..	..	..	2	22	..	9	..	..	..	4	..
Dyspepsia	..	..	..	..	..	1	1	1	..	10	..	1	..	1	1
Accidents and diseases not classified.....	2	15	3	4	6	9	39	27	30	238	6	7	4	40	1
TOTAL	7	18	11	13	17	23	89	77	38	305	12	14	4	64	13

* Not vaccinated. + With rash and opthalmia.

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

y of June, 1862.

ALFORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	7	Small-pox
..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox
..	1	..	..	..	..	..	..	..	..	..	5	Measles
..	..	..	..	..	..	..	..	..	..	..	1	Scarlatina
..	..	.	..	..	..	..	..	..	..	..	1	Diphtheria
1	..	..	..	1	..	..	..	..	..	..	10	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	..	Croup
..	2	5	1	2	..	..	1	..	2	..	24	Diarrhœa
..	..	..	..	..	..	..	..	..	..	..	3	Dysentery
..	3	..	..	..	..	..	..	..	1	2	26	Continued Fever
..	..	..	..	..	..	..	..	..	..	1	6	Erysipelas
..	3	1	1	1	2	..	2	2	3	4	36	Rheumatism
..	4	..	..	..	..	..	..	..	3	2	11	Neuralgic Affections
1	1	..	..	..	..	..	..	..	..	1	12	Constitutional Syphilis
..	5	..	1	..	..	2	..	..	..	1	28	Phthisis
3	..	..	..	..	..	..	..	1	..	2	11	Insanity
4	7	4	4	2	5	1	3	1	6	3	102	Bronchitis, Influenza, and Catarrah.
..	..	..	..	..	..	..	2	..	1	..	5	Pleurisy & Pneumonia.
7	3	..	..	..	..	2	..	..	..	4	53	Skin Disease.
..	6	..	..	1	..	1	3	..	4	5	37	Dyspepsia
7	59	2	5	1	4	6	20	4	15	4	527	Accidents and diseases not classified
23	94	12	12	8	11	12	31	8	35	29	905	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

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(2) ,, T. W. DYSON,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	1	1	..	..	..	..	..	..	..	..	2	1
Measles	2	..	..	..	2	1	..	2	..	..	7	2
Whooping-cough	2	..	..	1	..	5	..	..	1	..	9	No rtrn.
Scarlatina	..	..	..	..	1	..	..	..	1	..	2	..
Diarrhœa	1	2	..	..	1	..	..	..	..	..	4	7
Fever	1	..	1	..	1	1	1	..	1	†2	8	13
Diseases of the Lungs	9	7	..	7	..	5	3	2	8	2	43	41
Other causes	10	6	9	4	11	*9	9	6	14	5	83	134
TOTAL NO. OF DEATHS.	26	16	10	12	16	21	13	10	25	9	158	193
TOTAL NO. OF BIRTHS.	30	30	4	16	20	33	22	22	44	13	234	318

* 1 Inquest. † 1 Typhus.

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..	..	....	..	..... Cholera	..	..	..	..
18	19	20	57	.... Erysipelas	20	20	24	64
1	1	1	3	.. Puerperal Fever ..	..	..	..	..
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Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, JUNE 21, 1862. [No. 99.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKPRETH ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·803	29·831	29·838	—	29·848	29·771	28·952
Highest (Unreduced)	30·034	30·102	30·124	—	30·132	30·045	29·220
Lowest (Unreduced)	29·684	29·647	29 680	—	29·730	29·629	28·840
Range	0·350	0·455	0·434	—	0·402	0·416	0·380
Temperature.							
Adopted Mean	51·8	53·1	52·9	54·1	52·3	52·4	49·5
Range for Week	13·0	21·0	22·3	23·5	21·0	21·9	14·8
Daily Range	8·6	14·0	15·9	14·6	11·5	14·4	10·3
Maximum in Shade	61·0	64·0	64·8	64·5	64·2	63·6	58·9
Minimum in Shade	48·0	43·0	42·5	41·0	43·2	41·7	44·1
Maximum in Sun	—	79·8	—	88·0	72·2	74·9	—
Maximum in Sun: Black bulb in Vacuo	—	98·8	106·8	—	—	—	95·7
Minimum on Grass	—	40·0	41·0	42·8	40·7	41·2	44·2
Temperature in Ground at surface	—	52·10	54·40	—	—	—	—
Temperature 6 inches below	—	52·59	54·23	—	—	—	50·54
Temperature 12 inches below	—	54·00	55·74	—	—	—	51·70
Temperature of Evaporation	49·0	49·8	49·1	50·2	48·9	48·6	47·7
Temperature of Dew Point	46·2	46·5	45·3	46·4	45·4	44·7	45·8
Temperature of Air—Dew Point	5·6	6·6	7·6	7·7	6·9	7·7	3·7
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	3·52	3·55	3·44	3·55	3·45	3·38	3·56
Required to Saturate do	0·84	0·97	1·14	1·17	1·01	1·10	0·49
Weight of a cubic foot of Air	539·1	538·1	538·9	537·5	539·8	538·3	526·4
Degree of Humidity (Saturation—1,000)	0·812	0·783	0·761	0·747	0·779	0·756	0·879
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	4·33	4·38	4·19	4·37	4·20	4·09	4·26
Elastic force of Vapour	0·313	0·317	0·303	0·316	0·304	0·296	0·308
Clouds (Covered—10 Clear—0)	—	8·1	9·0	—	7·6	8·4	7·8
Prevailing Winds	—	SW.	SW.	NW.	NW, W.	NW, SW.	W, NW.
Rain	—	0·326	0·630	0·440	0·339	0·602	0·870
Days on which it fell	—	4	5	4	6	6	7
Ozonometer.							
Moffat (0—10)	—	0·78	—	2·86	4·78	2·71	8·43
Schonbein (0—10)	—	0·43	—	—	—	—	—
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·072	0·087	0·098	0·103	0·089	0·098	0·047
Weekly Evaporation	0·504	0·609	0·686	0·721	0·623	0·686	0·329

The mean temperature of the past week was 5·0° below the average of the last thirteen years, 10·2° below the corresponding week last year, and colder than any corresponding week during the last thirteen years.

The mean temperature was the highest at Ollerenshaw and the lowest at Bowdon.

The degree of humidity was the least at Bowdon and the highest at Ollerenshaw.

Ozone occurred at Old Trafford upon 1 day, Bowdon 5 days, Thelwall 7 days, Eccles 5 days, and Ollerenshaw 7 days.

The weather, ever since the beginning of June, has been remarkably unseasonable; the variations of the atmospheric pressure have been as great as during winter, accompanied by a sky nearly always covered with clouds, and rain at least every other day.

Old Trafford, Manchester,
June 24, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Satu

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital 14
Small-pox	..	..	..	*1	1	..	2	..	1	..	1	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	2	..	..	..	..	2	4	..	..	..	..	..	..	1	..
Scarlatina	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	2	..	..	..	1	3	..	..	..	..	..	..	1	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	3	1	1	1	1	7	1	..	3	..	..	..	5	4
Dysentery	1	1	..	..	..	..	2	..	1	2	1	..	..	1	1
Continued Fever	3	2	..	9	2	1	17	10	3	..	2	2	1	6	2
Erysipelas	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..
Rheumatism	6	1	..	2	..	..	9	5	2	19	2	..	2	..	..
Neuralgic Affections	..	..	..	1	1	..	2	1	..	7	..	..	2	..	1
Constitutional Syphilis	..	..	..	..	..	..	..	3	..	4	..	..	..	3	3
Phthisis	1	..	1	1	..	2	5	6	1	14	6	1	2	6	1
Insanity	..	..	2	..	..	..	2	6	..	2	..	..	1	..	..
Bronchitis, Influenza & Catarrh	2	2	4	3	7	6	24	13	2	35	3	2	2	17	4
Pleurisy and Pneumonia	1	..	1	..	..	..	2	2	..	..	..	..	..	..	..
Skin Diseases	1	1	1	..	3	1	7	5	..	17	..	..	..	2	2
Dyspepsia	..	..	..	1	..	..	1	2	..	23	2	..	..	6	3
Accidents and diseases not classified	13	15	7	6	12	5	58	45	33	318	5	7	12	49	5
TOTAL	30	27	17	25	28	19	146	100	43	446	22	12	22	97	27

* Not vaccinated—had small pox before.

ANITARY ASSOCIATION.

l Public Institutions of Manchester and adjoining Districts,

y of June, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....	....	477.	....	..	646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....	..	68,209.	..	..	44,850	..	21739	....	....	....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	3	..	..	..	..	..	..	..	..	..	7	Small-pox
..	..	..	..	..	..	..	..	..	..	1	1	Chicken-pox
..	..	..	..	1	..	3	1	1	..	..	11	Measles
..	..	..	..	..	..	..	..	..	..	..	1	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	2	..	..	..	..	..	4	1	..	..	14	Whooping-cough
..	..	..	..	..	..	..	1	..	..	..	1	Croup
..	3	3	..	1	1	..	4	..	3	..	35	Diarrhœa
..	2	..	..	..	..	1	..	..	..	1	12	Dysentery
..	4	..	2	..	..	1	..	..	..	1	52	Continued Fever
..	..	..	..	..	..	..	..	..	..	..	3	Erysipelas
1	2	1	..	2	1	..	4	..	3	..	53	Rheumatism
..	2	..	1	..	1	1	1	..	2	4	26	Neuralgic Affections
2	..	..	..	..	..	..	..	..	1	1	18	Constitutional Syphilis
2	2	..	..	..	1	..	1	..	1	1	50	Phthisis
..	..	..	..	..	..	..	..	..	..	2	13	Insanity
2	8	7	2	3	6	1	6	2	4	..	150	Bronchitis, Influenza, and Catarrah.
..	..	..	..	..	..	..	1	..	1	..	6	Pleurisy & Pneumonia.
6	6	..	..	5	..	..	..	..	1	3	54	Skin Disease.
1	7	..	..	1	2	..	3	..	5	1	59	Dyspepsia
4	48	5	4	3	3	6	31	9	20	2	681	Accidents and diseases not classified
18	89	16	9	16	15	13	57	13	41	17	1247	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) " EVAN THOMAS,
(7) " J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, " W. H. HUGHES, " C. H. BRADDON,
(13) " H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) " J. TEALE,
(17) " T. F. BROWNBILL
(18) " J. O. BRADBURY,
(19) " W. B. STOTT,
(20) " T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.
(23) " W. B. MIDWOOD,
(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1	2	..	..	..	..	..	..	..	..	3	2
Whooping-cough	1	..	..	..	..	..	1	1	.	..	3	No rtrn.
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	1	..	..	..	1	2	..	3	..	7	12
Fever	1	1	1	1	2	..	..	..	1	..	7	9
Diseases of the Lungs	4	2	..	4	..	3	2	6	11	3	35	33
Other causes	14	11	33	9	10	3	10	7	*21	4	122	101
TOTAL NO. OF DEATHS.	21	17	34	14	12	7	15	14	36	7	177	157
TOTAL NO. OF BIRTHS.	62	40	25	19	22	42	36	35	88	19	388	294

* 11 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson, Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD. Population in 1861, 390,815.

4 Weeks ending 29th March.	4 Weeks ending 26th April.	5 weeks ending 31st May.	TOTAL.	DISEASES.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	5 Weeks ending 31st. May.	TOTAL.
..	1	2	3	.... Small-pox	1	3	12	16
1	3	18	22	.... Chicken-pox	10	9	12	31
31	37	71	139	..... Measles	41	31	40	112
13	18	17	48	.... Scarlatina	13	5	18	36
7	1	3	11	.... Diphtheria	1	..	4	5
46	50	67	163	.. Whooping-cough ..	97	128	112	337
5	1	2	8	..... Croup	2	5	3	10
204	172	331	707	.....Diarrhœa.. ...	96	112	152	360
4	2	3	9	.... Dysentery	11	21	35	67
..	..	....	..	..... Cholera	..	..	..	..
18	19	20	57	.... Erysipelas	20	20	24	64
1	1	1	3	.. Puerperal Fever ..	..	..	..	..
20	22	18	60	..... Insanity	39	42	43	124
924	707	561	2192	Bronchitis and Catarrh	957	832	891	2680
19	21	18	58	..... Pleurisy	55	54	58	167
20	18	23	61	... Pneumonia ..				
7	7	5	19	.... Carbuncle	....	..	....	..
3281	3551	4462	11294	Accidents, and all other Diseases	3181	3229	4323	10733
4601	4631	5622	14854	..... TOTAL	4524	4491	5727	14742

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate.

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, JUNE 28, 1862. [No. 100.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKRETH ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·757	29·781	29·814	—	29·818	29·790	
Highest (Unreduced)	30·098	30·099	30·118	—	30·160	30·114	
Lowest (Unreduced)	29·678	29·680	29·638	—	29·600	29·578	
Range	0·420	0·419	0·480	—	0·560	0·536	
Temperature.							
Adopted Mean	52·9	54·8	53·6	53·6	53·1	53·6	
Range for Week	16·5	21·5	26·3	36·4	18·6	21·9	
Daily Range	9·2	14·7	13·9	18·6	12·5	12·9	
Maximum in Shade	66·0	69·5	69·8	73·3	64·6	67·2	
Minimum in Shade	49·5	48·0	43·5	36·9	46·0	45·3	
Maximum in Sun	—	87·3	—	97·2	77·4	87·9	
Maximum in Sun: Black bulb in Vacuo	—	103·0	103·0	—	—	—	
Minimum on Grass	—	43·8	42·0	43·8	43·3	44·2	
Temperature in Ground at surface	—	52·80	54·74	—	—	—	
Temperature 6 inches below	—	53·02	54·50	—	—	—	
Temperature 12 inches below	—	54·06	56·01	—	—	—	
Temperature of Evaporation	50·3	51·5	50·3	51·2	49·9	50·3	
Temperature of Dew Point	47·7	48·8	47·1	48·9	46·7	47·1	
Temperature of Air—Dew Point	5·2	6·0	6·5	4·7	6·4	6·5	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·71	3·83	3·63	3·90	3·57	3·63	
Required to Saturate do	0·78	1·03	0·99	0·72	0·95	0·99	
Weight of a cubic foot of Air	537·2	534·3	537·4	537·3	538·1	537·4	
Degree of Humidity (Saturation—1,000)	0·827	0·782	0·782	0·824	0·789	0·782	
	INS.	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·58	4·77	4·48	4·77	4·41	4·48	
Elastic force of Vapour	0·331	0·345	0·324	0·345	0·319	0·324	
Clouds (Covered—10 Clear—0)	—	8·7	5·9	—	7·0	8·1	
Prevailing Winds	—	W, SW.	SW, NW.	NW.	NW.	W, NW.	
Rain	—	0·732	0·520	0·310	0·600	0·564	
Days on which it fell	—	6	5	4	6	5	
Ozonometer.							
Moffat (0—10)	—	2·28	—	0·86	4·00	3·57	
Schonbein (0—10)	—	1·07	—	—	—	—	
	INS.	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·070	0·088	0·088	0·067	0·085	0·088	
Weekly Evaporation	0·490	0·616	0·616	0·469	0·595	0·616	

There were 7 barometric oscillations during the week, the amount being 1·393 inches. There were 5 temperature oscillations at 8 a.m., the amount being 24·4°.

The mean temperature of the past week was 4·7° below the average of the last thirteen years, and 5·8° below the corresponding week last year,

The mean temperature was the highest at Old Trafford and the lowest at the Royal Infirmary.

The degree of humidity was the highest at the Royal Infirmary, and the least at Sale, Old Trafford, and Eccles, the three last stations being all exactly alike.

Ozone occurred at Old Trafford upon 4 days, Bowdon 4 days, Thelwall 7 days, and Eccles 4 days.

The weather, during the week has been remarkably uncongenial for the season.

Old Trafford, Manchester,
July 2, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Satur

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Measles	1	..	..	1	..	..	2	..	..	..	..	..	..	1	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Whooping-cough	..	1	..	..	..	..	1	3	..	..	..	..	..	1	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa.....	1	..	..	..	..	..	1	1	..	4	1	..	..	5	2
Dysentery	..	..	..	2	1	..	3	..	..	..	..	..	..	1	1
Continued Fever.....	3	..	..	3	..	1	7	5	1	..	1	1	..	6	..
Erysipelas	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..
Rheumatism	1	3	2	2	3	1	12	3	2	16	..	1	..	..	..
Neuralgic Affections	..	..	..	..	1	..	1	1	..	..	..	..	..	..	2
Constitutional Syphilis	..	..	..	..	..	..	..	2	..	17	..	1	..	1	1
Phthisis	1	1	..	1	..	..	3	4	..	20	1	..	..	2	2
Insanity	..	..	1	..	1	..	2	2	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	3	3	2	4	6	4	22	14	1	30	3	6	1	6	2
Pleurisy and Pneumonia....	4	..	1	1	..	..	6	..	..	..	..	1	1	..	..
Skin Diseases.....	1	..	..	1	..	..	2	6	..	16	..	..	..	..	5
Dyspepsia	2	1	..	2	3	2	10	1	..	30	..	..	1	4	1
Accidents and diseases not classified.....	10	14	11	8	12	14	69	45	29	237	8	17	8	62	4
TOTAL	27	23	17	25	27	22	141	90	33	372	14	27	11	89	22

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

of June, 1862.

LFORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	..	Small-pox
..	..	..	..	..	..	..	..	..	..	..	2	Chicken-pox
..	4	..	1	..	..	2	2	..	..	..	12	Measles
..	..	..	..	..	..	..	1	..	..	..	1	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	1	Diphtheria
..	3	..	1	..	..	..	4	..	..	..	14	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	..	Croup
1	7	2	..	..	..	..	2	1	4	1	33	Diarrhœa
..	..	..	..	..	..	..	..	..	..	1	6	Dysentery
1	2	..	..	1	1	..	..	..	..	..	27	Continued Fever
..	..	..	..	..	..	..	..	..	..	..	3	Erysipelas
..	5	..	..	..	2	1	1	3	5	2	53	Rheumatism
..	3	..	..	..	1	1	..	1	2	2	16	Neuralgic Affections
..	2	..	..	..	..	..	1	..	1	1	27	Constitutional Syphilis
..	6	1	..	..	..	..	..	..	1	2	42	Phthisis
3	..	..	..	..	..	..	..	..	..	1	8	Insanity
..	26	5	5	3	6	2	4	3	5	..	148	Bronchitis, Influenza, and Catarrah.
..	..	..	..	..	..	..	1	..	1	..	10	Pleurisy & Pneumonia.
..	8	..	..	1	..	..	1	..	1	4	44	Skin Disease.
..	11	1	..	2	..	3	2	..	4	3	75	Dyspepsia
4	44	3	..	4	6	6	32	5	25	3	637	Accidents and diseases not classified
9	121	12	7	11	16	15	51	13	49	20	1159	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) " EVAN THOMAS,
(7) " J. BROADBENT,

(8) Mr. M. ROWLAND DAY,
(9) } Mr. W. J. MALLETT,
(10) } W. H. HUGHES,
(11) } " C. H. BRADDON,
(12) }
(13) " H. RUNCORN,
(14) Dr. WHITEHEAD,

(15) Mr. W. GOLLAND,
(16) " J. TEALE,
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(22) Mr. H. M. WILLIAMSON.
(23) " W. B. MIDWOOD,
(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	1	..	..	..	..	..	..	1	3
Whooping-cough	1	..	..	..	..	..	..	1	..	2	..	4	No rtrn.
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	3	..	1	..	..	1	..	..	1	1	..	7	9
Fever	..	1	2	..	‡1	..	1	..	..	2	1	8	3
Diseases of the Lungs	10	8	1	1	..	4	3	..	7	8	3	45	48
Other causes	*20	8	15	†14	9	7	22	§8	6	20	1	130	155
TOTAL NO. OF DEATHS.	34	17	19	15	11	12	26	9	14	33	5	195	218
TOTAL NO. OF BIRTHS.	46	47	24	21	18	37	26	13	28	86	18	364	378

*10 †8 & §2 Inquests. ‡ Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 29th March.	4 Weeks ending 26th April.	5 weeks ending 31st May.	TOTAL.	DISEASES.	4 Weeks ending 29th March.	4 Weeks ending 26th April.	5 Weeks ending 31st. May.	TOTAL.
..	1	2	3	.... Small-pox	1	3	12	16
1	3	18	22	.... Chicken-pox	10	9	12	31
31	37	71	139	..... Measles	41	31	40	112
13	18	17	48	.... Scarlatina	13	5	18	36
7	1	3	11	.... Diphtheria	1	..	4	5
46	50	67	163	.. Whooping-cough ..	97	128	112	337
5	1	2	8	..... Croup	2	5	3	10
204	172	331	707	.....Diarrhœa.. ...	96	112	152	360
4	2	3	9	.... Dysentery	11	21	35	67
..	..	....	..	..... Cholera	..	..	..	..
18	19	20	57	.... Erysipelas	20	20	24	64
1	1	1	3	.. Puerperal Fever ..	..	..	..	..
20	22	18	60	..... Insanity	39	42	43	124
924	707	561	2192	Bronchitis and Catarrh	957	832	891	2680
19	21	18	58	..... Pleurisy	55	54	58	167
20	18	23	61	... Pneumonia ..				
7	7	5	19	.... Carbuncle	....	..	....	..
3281	3551	4462	11294	Accidents, and all other Diseases	3181	3229	4323	10733
4601	4631	5622	14854	..... TOTAL	4524	4491	5727	14742

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, JULY 5, 1862. [No. 101.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·671	29·655	29·689	—	29·684	29·666	
Highest (Unreduced)	29·880	29·892	29·924	—	29·920	29·872	
Lowest (Unreduced)	29·616	29·326	29·356	—	29·350	29·313	
Range	0·264	0·566	0·568	—	0·570	0·559	
Temperature.							
Adopted Mean	52·6	54·3	53·0	54·1	53·2	52·5	
Range for Week	13·5	27·5	23·0	28·7	23·2	20·8	
Daily Range	10·0	16·4	17·3	18·9	14·0	14·7	
Maximum in Shade	61·0	72·0	65·5	71·5	66·7	63·7	
Minimum in Shade	47·5	44·5	42·5	42·8	43·5	42·9	
Maximum in Sun	—	86·0	—	93·8	77·5	78·5	
Maximum in Sun: Black bulb in Vacuo	—	106·0	105·0	—	—	—	
Minimum on Grass	—	40·0	40·5	42·0	40·0	41·0	
Temperature in Ground at surface	—	52·58	54·47	—	—	—	
Temperature 6 inches below	—	52·87	54·50	—	—	—	
Temperature 12 inches below	—	54·15	55·58	—	—	—	
Temperature of Evaporation	49·9	51·0	48·5	51·8	51·5	49·0	
Temperature of Dew Point	47·3	47·8	44·0	49·5	49·8	45·5	
Temperature of Air—Dew Point	5·3	6·5	9·0	4·6	3·4	7·0	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·71	3·77	3·25	4·03	4·03	3·45	
Required to Saturate do	0·81	0·99	1·25	0·69	0·51	1·05	
Weight of a cubic foot of Air	536·6	533·8	536·1	534·6	535·6	536·1	
Degree of Humidity (Saturation—1,000)	0·824	0·782	0·715	0·842	0·883	0·825	
	INS.	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·52	4·61	3·98	4·91	4·95	4·22	
Elastic force of Vapour	0·327	0·333	0·288	0·355	0·358	0·305	
Clouds (Covered—10 Clear—0)	—	8·9	4·7	—	7·3	8·1	
Prevailing Winds	—	SW, NW.	NW, SW.	SW.	W.	W, NW.	
Rain	—	1·290	1·560	0·890	1·357	1·667	
Days on which it fell	—	6	7	6	6	6	
Ozonometer.							
Moffat (0—10)	—	1·43	—	2·07	3·28	2·00	
Schonbein (0—10)	—	0·00	—	—	—	—	
	INS.	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·070	0·089	0·115	0·064	0·048	0·091	
Weekly Evaporation	0·490	0·623	0·805	0·320	0·336	0·637	

There were 7 barometric oscillations during the week, the amount being 0·942 inches. There were 4 temperature oscillations, the amount being 12·0°.

The mean temperature of the past week was 4·1° below the average of the last thirteen years, and 3·6° below the corresponding week last year,

The mean temperature was the highest at Old Trafford and the lowest at Eccles.

The degree of humidity was the highest at Thelwall and the least at Sale.

Ozone occurred at Old Trafford upon 3 days, Bowdon 5 days, Thelwall 7 days, and Eccles 4 days.

Rain fell nearly every day, and in large quantities, at all the Stations.

The rain fall during June, at the various Stations, has been as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	3·072	22
Sale	2·830	22
Bowdon	2·380	21
Thelwall	2·673	23
Eccles	3·253	25

The most rain appears to have fallen in the immediate neighbourhood of Manchester.

Old Trafford, Manchester. G. V. VERNON, F.R.A.S.

MANCHESTER AND SAI

New Cases of Disease coming under Treatment in Pauper

During the Week ending Sat

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childre	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	6	..	..	..	6	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	1	..	..	..	..	..	2	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	..	..	2	2	..	..	3	..	1	..	5	1
Croup	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Diarrhœa.....	..	5	3	1	4	..	13	2	..	..	..	1	..	8	7
Dysentery	..	..	..	2	..	..	2	1	..	8	..	1	..	1	..
Continued Fever.....	..	..	1	3	2	1	7	2	1	..	..	2	3	4	..
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Rheumatism	3	1	1	4	3	..	12	5	1	12	..	..	1	1	..
Neuralgic Affections.....	..	..	..	..	..	..	..	..	..	1	..	..	1	1	2
Constitutional Syphilis	..	..	..	..	..	..	..	1	..	10	..	2	..	2	1
Phthisis	..	..	1	1	..	2	4	3	..	28	1	1	2	2	..
Insanity	1	..	..	..	..	..	1	3	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	2	2	6	1	6	3	20	13	..	43	2	6	1	8	4
Pleurisy and Pneumonia....	1	..	..	..	..	..	1	1	..	..	..	..	..	..	1
Skin Diseases.....	..	..	..	..	..	2	2	14	..	15	..	..	..	3	4
Dyspepsia	..	..	..	..	..	2	2	..	..	59	1	1	..	3	2
Accidents and diseases not classified.....	3	18	6	10	11	10	58	32	30	285	13	9	7	42	2
TOTAL	11	26	24	22	26	22	131	78	32	464	17	25	17	83	24

* Seve

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

y of July, 1862.

ALFORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....	....	477.	....	..	646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....	..	68,209.	..	..	44,850	..	21739	....	....	.. ....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
1*	..	..	..	..	..	..	..	..	..	..	7	Small-pox
..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox
..	2	..	1	..	..	1	..	4	..	..	11	Measles
..	1	..	..	..	..	..	..	..	..	..	4	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
2	1	..	..	..	..	..	1	..	..	..	16	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	1	Croup
1	3	1	2	..	..	1	2	..	3	2	46	Diarrhœa
..	1	..	1	..	..	..	..	..	..	..	15	Dysentery
..	1	..	..	..	1	..	..	..	..	1	23	Continued Fever
..	..	..	..	..	..	..	..	..	..	..	1	Erysipelas
2	2	2	1	2	..	..	3	1	6	2	55	Rheumatism
..	..	..	..	..	1	..	..	..	2	1	9	Neuralgic Affections
1	..	..	..	..	..	..	1	..	1	1	20	Constitutional Syphilis
..	5	..	1	..	..	..	3	..	..	2	53	Phthisis
3	..	..	..	..	..	..	..	..	..	2	10	Insanity
..	22	4	3	3	1	3	5	2	4	..	148	Bronchitis, Influenza, and Catarrah.
..	..	..	..	..	..	1	3	2	1	..	10	Pleurisy & Pneumonia.
..	5	..	3	8	2	1	..	..	2	3	63	Skin Disease.
..	5	1	..	..	3	..	2	..	5	1	85	Dyspepsia
9	39	2	5	4	4	5	33	2	27	4	626	Accidents and diseases not classified
19	87	10	17	17	12	12	53	11	51	19	1203	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,
(5) Mr. C. S. BOMPAS,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	1
Measles	1	..	..	..	..	1	2	..	3	..	1	8	1
Whooping-cough	1	1	1	..	..	..	..	..	1	..	..	4	No rtrn.
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	1	..	..	1	..	1	..	1	..	..	4	25
Fever	..	1	..	..	1	..	‡1	..	1	..	..	4	6
Diseases of the Lungs	12	3	..	..	1	7	3	..	2	6	..	34	55
Other causes	15	*18	33	1	17	†10	12	8	¿14	14	8	150	106
TOTAL No. OF DEATHS.	29	24	34	1	20	18	19	8	22	20	9	204	194
TOTAL No. OF BIRTHS.	52	41	17	11	29	27	25	18	25	74	20	339	293

¿9 †1 & *14 Inquests. ‡ Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th April.	5 weeks ending 31st May.	4 Weeks ending 28th June.	TOTAL.	DISEASES.	4 Weeks ending 26th April.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	TOTAL.
1	2	..	3	.... Small-pox	3	12	19	34
3	18	3	24	.... Chicken-pox	9	12	5	26
37	71	31	139	..... Measles	31	40	42	113
18	17	13	48	.... Scarlatina	5	18	5	28
1	3	8	12	.... Diphtheria	..	4	3	7
50	67	31	148	.. Whooping-cough ..	128	112	56	296
1	2	1	4	..... Croup	5	3	3	11
172	331	355	858	.....Diarrhœa.. ...	112	152	130	394
2	3	..	5	.... Dysentery	21	35	26	82
..	....	1	1	..... Cholera	..	..	..	..
19	20	20	59	.... Erysipelas	20	24	14	58
1	1	..	2	.. Puerperal Fever ..	..	..	..	..
22	18	23	63	..... Insanity	42	43	37	122
707	561	396	1664	Bronchitis and Catarrh	832	891	530	2253
21	18	11	50	..... Pleurisy	54	58	30	142
18	23	17	58	.... Pneumonia ..				
7	5	2	14	.... Carbuncle	..	....	....	..
3551	4462	3634	11647	Accidents, and all other Diseases	3229	4323	3133	10685
4631	5622	4546	14799	..... TOTAL	4491	5727	4033	14251

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EALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

OL. II.] WEEK ENDING SATURDAY, JULY 12, 1862. [No. 102.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, Esq.	Old Trafford, G. V. VERNON, Esq.	Sale, J. CURTIS, Esq.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, Esq.	Eccles, T. MACKERETH Esq	Ollerenshaw, A. NEILD, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Mean @ 32° F.	29·516	29·549	29·584	——	29·549	29·552	28·769
Highest (Unreduced)	29·858	29·958	29·996	——	29·848	29·942	29·070
Lowest (Unreduced)	29·278	29·311	29·302	——	29·300	29·260	28·510
Range	0·580	0·647	0·694	——	0·548	0·682	0·560
Temperature.							
Adopted Mean	57·0	57·3	55·9	55·8	56·1	55·9	53·0
Range for Week	17·0	22·2	25·0	25·4	30·0	22·8	22·6
Daily Range	10·5	13·6	16·1	14·7	13·2	14·1	11·9
Maximum in Shade	69·0	70·7	72·0	71·4	76·8	69·1	68·0
Minimum in Shade	52·0	48·5	47·0	46·0	46·8	46·3	45·4
Maximum in Sun	——	87·3	——	97·0	82·5	88·0	——
Maximum in Sun: Black bulb in Vacuo	——	110·0	101·2	——	——	——	100·2
Minimum on Grass	——	42·2	47·0	46·0	45·0	46·8	42·7
Temperature in Ground at surface	——	54·63	56·18	——	——	——	——
Temperature 6 inches below	——	54·88	56·20	——	——	——	53·41
Temperature 12 inches below	——	55·68	57·31	——	——	——	52·78
Temperature of Evaporation	54·8	53·8	53·6	53·8	55·4	53·7	52·5
Temperature of Dew Point	52·8	50·6	51·4	51·9	54·8	51·6	52·0
Temperature of Air—Dew Point	4·2	6·7	4·5	3·9	1·3	4·3	1·0
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.
Weight of Vapour in a cubic foot of Air	4·44	4·11	4·29	4·36	4·80	4·32	4·35
Required to Saturate do	0·76	1·15	0·70	0·62	0·22	0·67	0·15
Weight of a cubic foot of Air	528·1	528·8	530·6	530·7	529·6	530·1	518·8
Degree of Humidity (Saturation—1,000)	0·858	0·783	0·861	0·878	0·952	0·867	0·965
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Water in a vertical column of the Atmosphere	5·53	5·10	5·24	5·34	5·95	5·28	5·37
Elastic force of Vapour	0·400	0·369	0·379	0·386	0·430	0·382	0·388
Clouds (Covered—10 Clear—0)	——	7·9	6·8	——	8·0	9·0	9·5
Prevailing Winds	——	S,SW.	SW.	W,SW	SW,NW.	W,SW.	W.
Rain	——	1·558	0·990	1·450	0·857	0·841	1·370
Days on which it fell	——	7	6	6	4	7	7
Ozonometer.							
Moffat (0—10)	——	1·71	——	2·56	3·71	1·14	8·64
Schonbein (0—10)	——	0·71	——	——	——	——	——
	INS.	INS.	INS.	INS.	INS.	INS.	INS.
Daily Evaporation	0·065	0·101	00·68	0·060	0·021	0·065	0·015
Weekly Evaporation	0·455	0·707	0·476	0·420	0·147	0·455	0·105

There were 6 barometric oscillations during the week, the amount being 1·884 inches. There were 5 temperature llations, the amount being 12·5°.

The mean temperature of the past week was 3·2° below the average of the last thirteen years, and 1·7° below corresponding week last year,

The mean temperature was the highest at Old Trafford and the lowest at Ollerenshaw.

The degree of humidity was the highest at Ollerenshaw and the least at Old Trafford

Ozone occurred at Old Trafford upon 3 days, Bowdon 6 days, Thelwall 7 days, Eccles 4 days, and Ollerenshaw 7 days.

The great fall of rain, during the week, appears to have been very unequally distributed, the stations of Old Trafford, rdon, and Ollerenshaw, all receiving a much larger amount than any of the other stations.

Trafford, Manchester,
July 15, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAI

New Cases of Disease coming under Treatment in Pauper

During the Week ending Satu

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childri	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Chicken-pox	..	..	..	..	3	..	3	..	..	..	..	..	..	..	..
Measles	1	..	..	..	..	..	1	1	..	..	..	..	..	2	..
Scarlatina	..	..	..	1	2	..	3	..	..	..	3	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	..	..	..	..	..	..	..	..	1	..	2	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Diarrhœa.....	1	..	1	2	2	..	6	2	..	7	..	..	..	9	2
Dysentery	..	..	..	1	..	..	1	1	..	..	..	..	..	4	..
Continued Fever.....	..	..	1	7	..	..	8	1	2	..	1	2	1	2	..
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatism	3	3	2	..	5	..	13	7	1	19	..	1	1	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..
Constitutional Syphilis	..	..	..	..	..	..	..	5	..	12	1	..	..	1	1
Phthisis	..	..	1	1	..	5	7	2	..	13	2	1	2	1	1
Insanity	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	2	3	6	2	3	4	20	17	..	23	4	7	..	3	4
Pleurisy and Pneumonia....	2	..	..	..	..	..	2	4	..	6	..	..	..	1	1
Skin Diseases.....	3	..	..	1	..	4	8	9	1	17	1	..	..	2	4
Dyspepsia	1	3	..	1	1	2	8	2	..	17	..	3	..	3	1
Accidents and diseases not classified.....	19	19	8	4	9	17	76	37	50	281	8	9	8	30	6
TOTAL	32	28	19	20	25	32	156	90	54	400	21	24	12	60	22

SANITARY ASSOCIATION.

and Public Institutions of Manchester and adjoining Districts,

h day of July, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK				
... 1,329				.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.
... 70,967.				.. 68,209. ..			.. 44,850 ..		21739	....	....	. ....	Population in 1861.
POOR LAW DIS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
16	17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	..	1	Small-pox
..	..	..	..	..	..	..	..	..	..	..	..	3	Chicken-pox
2	..	1	..	..	2	1	..	..	1	..	..	11	Measles
..	..	1	..	..	..	..	..	..	..	..	..	7	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	1	..	..	..	..	..	..	5	..	2	..	12	Whooping-cough
..	..	1	..	..	..	..	..	..	..	..	..	2	Croup
1	..	2	8	1	1	..	..	3	1	4	2	49	Diarrhœa
..	..	2	..	..	..	..	..	..	1	..	..	9	Dysentery
..	..	2	..	*1	..	2	2	..	..	2	3	31	Continued Fever
..	..	1	1	..	..	1	1	..	..	..	..	4	Erysipelas
1	2	3	..	..	2	..	1	5	3	1	2	63	Rheumatism
..	..	..	..	..	..	..	2	..	..	..	..	7	Neuralgic Affections
..	..	1	..	..	..	..	1	3	..	1	..	27	Constitutional Syphilis
3	..	3	..	..	..	1	1	1	..	3	2	43	Phthisis
..	5	..	..	..	..	..	..	..	..	..	3	10	Insanity
5	3	15	1	..	2	2	2	5	2	6	4	127	Bronchitis, Influenza, and Catarrah.
..	..	2	..	..	..	..	..	1	..	2	..	19	Pleurisy & Pneumonia.
2	1	3	..	3	6	1	..	..	..	2	4	64	Skin Disease.
1	..	5	..	2	3	1	..	2	..	10	..	61	Dyspepsia
6	6	62	3	2	3	5	3	31	3	25	4	658	Accidents and diseases not classified
1	18	104	13	9	19	14	13	56	11	58	24	1208	TOTAL.

* Typhus

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) " EVAN THOMAS,
(7) " J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, " W. H. HUGHES, " C. H. BRADDON,
(13) " H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) " J. TEALE,
(17) " T. F. BROWNBILL
(18) " J. O. BRADBURY,
(19) " W. B. STOTT,
(20) " T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.
(23) " W. B. MIDWOOD,
(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	1	..	..	..	1	..	2	4
Whooping-cough	1	..	..	1	1	..	..	1	..	1	..	5	No rtrn.
Scarlatina	..	1	1	..	1	1	..	..	..	..	..	4	..
Diarrhœa	..	3	..	2	..	..	..	..	..	..	..	5	37
Fever	1	..	..	..	..	..	..	..	..	‡1	..	2	4
Diseases of the Lungs	7	9	3	5	..	5	..	..	3	8	..	40	54
Other causes	8	11	6	3	13	†9	7	3	6	⁒16	3	85	118
TOTAL NO. OF DEATHS.	17	24	10	11	15	16	7	4	9	27	3	143	217
TOTAL NO. OF BIRTHS.	47	39	27	32	15	29	10	18	31	49	13	310	352

* Return from Pendleton District commenced June 28.
† 1 Inquest. ‡ Typhus. ⁒ A child, 12 months old, dies from Paralysis.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th April.	5 weeks ending 31st May.	4 Weeks ending 28th June.	TOTAL.	DISEASES.	4 Weeks ending 26th April.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	TOTAL.
1	2	..	3	.... Small-pox	3	12	19	34
3	18	3	24	.... Chicken-pox	9	12	5	26
37	71	31	139	..... Measles	31	40	42	113
18	17	13	48	.... Scarlatina	5	18	5	28
1	3	8	12	.... Diphtheria	..	4	3	7
50	67	31	148	.. Whooping-cough ..	128	112	56	296
1	2	1	4	..... Croup	5	3	3	11
172	331	355	858	.....Diarrhœa.. ...	112	152	130	394
2	3	..	5	.... Dysentery	21	35	26	82
..	....	1	1	..... Cholera	..	..	..	..
19	20	20	59	.... Erysipelas	20	24	14	58
1	1	..	2	.. Puerperal Fever ..	..	..	..	..
22	18	23	63	..... Insanity	42	43	37	122
707	561	396	1664	Bronchitis and Catarrh	832	891	530	2253
21	18	11	50	..... Pleurisy	54	58	30	142
18	23	17	58	... Pneumonia ..				
7	5	2	14	.... Carbuncle	..	....	....	..
3551	4462	3634	11647	Accidents, and all other Diseases	3229	4323	3133	10685
4631	5622	4546	14799	..... TOTAL	4491	5727	4033	14251

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, JULY 19, 1862. [No. 103.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·580	29·626	29·666	—	29·658	29·645	
Highest (Unreduced)	29·790	29·927	29·950	—	29·952	29·924	
Lowest (Unreduced)	29·536	29·556	29·612	—	29·552	29·550	
Range	0·254	0·371	0·338	—	0·400	0·374	
Temperature.							
Adopted Mean	57·5	58·4	58·0	57·2	57·2	58·2	
Range for Week	14·0	20·6	24·0	25·4	25·4	23·8	
Daily Range	4·9	16·0	16·4	17·4	15·5	17·1	
Maximum in Shade	68·0	71·0	71·5	70·4	71·0	70·6	
Minimum in Shade	54·0	50·5	47·5	45·0	45·6	46·8	
Maximum in Sun	—	93·5	—	100·2	82·0	90·6	
Maximum in Sun: Black bulb in Vacuo	—	111·6	113·5	—	—	—	
Minimum on Grass	—	47·8	46·0	45·0	42·5	46·7	
Temperature in Ground at surface	—	55·53	57·50	—	—	—	
Temperature 6 inches below	—	55·71	56·64	—	—	—	
Temperature 12 inches below	—	56·61	58·37	—	—	—	
Temperature of Evaporation	54·6	54·5	53·6	53·7	54·8	53·7	
Temperature of Dew Point	52·0	51·0	49·6	50·5	52·6	49·7	
Temperature of Air—Dew Point	5·5	7·4	8·4	6·7	4·6	8·5	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	4·33	4·19	3·98	4·09	4·42	3·99	
Required to Saturate do	0·97	1·27	1·42	1·15	0·82	1·45	
Weight of a cubic foot of Air	529·1	528·9	530·1	530·8	530·5	529·6	
Degree of Humidity (Saturation—1,000)	0·821	0·765	0·740	0·782	0·856	0·735	
	INS.	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	5·37	5·17	4·92	5·07	5·49	4·94	
Elastic force of Vapour	0·388	0·374	0·356	0·367	0·397	0·357	
Clouds (Covered—10 Clear—0)	—	6·8	5·4	—	6·3	7·1	
Prevailing Winds	—	SW.	SW.	S,SW	SW.	W,SW.	
Rain	—	0·916	0·760	0·420	0·533	0·587	
Days on which it fell	—	7	5	6	5	6	
Ozonometer.							
Moffat (0—10)	—	5·00	—	1·78	4·86	2·85	
Schonbein (0—10)	—	4·00	—	—	—	—	
	INS.	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·085	0·115	0·126	0·102	0·072	0·128	
Weekly Evaporation	0·595	0·805	0·882	0·714	0·504	0·896	

There were 7 barometric oscillations during the week, the amount being 1·238 inches. There were 4 temperature oscillations at 8 a.m., the amount being 24·9°.

The mean temperature of the past week was 2·8° below the average of the last thirteen years, and 1·1° below the corresponding week last year.

The mean temperature was the highest at Old Trafford and the lowest at Bowdon and Thelwall.

The degree of humidity was the highest at Thelwall and the least at Eccles.

Ozone occurred at Old Trafford upon 6 days; Bowdon 6 days; Thelwall 7 days; Eccles 6 days.

Old Trafford, Manchester,
July 23, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Satu

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital 14
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	1	..	..	1	2	..	..	..	..	..	..	1
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Diarrhœa	..	5	1	2	5	2	15	2	..	10	2	..	..	17	4
Dysentery	1	1	..	..	..	1	3	..	..	..	..	..	..	..	..
Continued Fever	1	..	1	4	..	3	9	1	1	..	..	..	..	5	..
Erysipelas	1	..	..	1	..	..	2	1	..	..	..	..	..	..	..
Rheumatism	1	2	2	1	..	2	8	3	3	15	..	1	3	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	5	..	..	..	1	2
Constitutional Syphilis	..	..	..	..	..	..	..	3	..	14	1	..	..	..	..
Phthisis	..	..	1	1	..	..	2	1	..	24	1	..	..	5	1
Insanity	..	1	..	..	..	..	1	3	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	1	4	3	1	7	2	18	5	..	34	2	4	..	8	2
Pleurisy and Pneumonia	..	..	1	..	..	..	1	1	..	1	..	..	1	..	2
Skin Diseases	2	4	1	..	..	2	9	8	..	11	..	..	..	6	1
Dyspepsia	..	2	..	..	..	1	3	4	..	20	..	..	..	4	2
Accidents and diseases not classified	7	20	14	6	14	19	80	34	30	277	15	8	13	48	8
TOTAL	14	39	24	17	26	32	152	68	34	411	21	13	17	97	24

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

y of July, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....		.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209. ..			.. 44,850 ..		21739	....	....	. ....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	..	Small-pox
..	..	..	..	..	..	..	..	..	..	1	1	Chicken-pox
..	..	..	2	..	..	..	1	..	..	..	7	Measles
..	..	..	..	..	..	..	..	..	..	..	..	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	..	..	..	..	1	..	2	..	1	..	6	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	2	Croup
..	5	6	2	..	2	..	1	..	2	4	76	Diarrhœa
..	4	..	2	..	..	..	..	..	..	1	10	Dysentery
..	3	..	..	..	2	..	..	..	1	1	26	Continued Fever
2	..	..	..	..	..	..	..	..	..	1	6	Erysipelas
..	6	2	..	1	..	..	4	1	3	..	52	Rheumatism
..	4	..	2	..	..	..	1	..	1	2	18	Neuralgic Affections
..	1	..	..	..	..	..	2	..	..	1	23	Constitutional Syphilis
..	7	..	..	..	..	1	3	..	1	1	47	Phthisis
1	..	..	..	..	..	..	..	..	..	2	7	Insanity
..	19	..	2	6	5	1	4	3	8	..	122	Bronchitis, Influenza, and Catarrah.
..	4	..	1	..	..	..	1	..	..	2	14	Pleurisy & Pneumonia.
1	5	..	..	1	..	..	..	..	2	4	49	Skin Disease.
..	10	..	..	2	1	..	6	..	6	..	63	Dyspepsia
9	42	5	5	4	3	3	27	2	31	5	662	Accidents and diseases not classified
13	110	13	16	14	14	5	52	6	56	25	1191	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,
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(17) " T. F. BROWNBILL
(18) " J. O. BRADBURY,
(19) " W. B. STOTT,
(20) " T. G. RICHMOND,
(21) Dr. ALEX. WILSON,

(22) Mr. H. M. WILLIAMSON.
(23) " W. B. MIDWOOD,
(24) " JOHN RAYNER,
(25) " J. M. KIRKMAN.
(26) " A. F. PENNINGTON
(27) " J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	1	..	..	..	..	..	..	..	..	1	..
Measles	..	1	..	..	2	..	1	..	..	..	1	5	1
Whooping-cough	..	1	..	..	..	2	..	1	..	..	..	4	No rtrn.
Scarlatina	..	1	..	..	..	..	1	..	..	1	..	3	..
Diarrhœa	2	..	2	..	1	..	2	..	..	..	1	8	41
Fever	..	..	1	..	..	..	..	..	‡1	1	1	4	7
Diseases of the Lungs	5	8	..	3	..	8	2	..	6	7	7	46	45
Other causes	13	9	14	9	8	†8	8	8	8	11	5	101	121
TOTAL NO. OF DEATHS.	20	20	18	12	11	18	14	9	15	20	15	172	215
TOTAL NO. OF BIRTHS.	33	33	15	22	12	26	20	29	35	64	27	316	314

* Return from Pendleton District commenced June 28.
† 1 Inquest. ‡ Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th April.	5 weeks ending 31st May.	4 Weeks ending 28th June.	TOTAL.	DISEASES.	4 Weeks ending 26th April.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	TOTAL.
1	2	..	3	.... Small-pox	3	12	19	34
3	18	3	24	.... Chicken-pox	9	12	5	26
37	71	31	139	..... Measles	31	40	42	113
18	17	13	48	.... Scarlatina	5	18	5	28
1	3	8	12	.... Diphtheria	..	4	3	7
50	67	31	148	.. Whooping-cough ..	128	112	56	296
1	2	1	4	..... Croup	5	3	3	11
172	331	355	858	.....Diarrhœa.....	112	152	130	394
2	3	..	5	.... Dysentery	21	35	26	82
..	....	1	1	..... Cholera	..	..	..	..
19	20	20	59	.... Erysipelas	20	24	14	58
1	1	..	2	.. Puerperal Fever ..	..	..	..	..
22	18	23	63	..... Insanity	42	43	37	122
707	561	396	1664	Bronchitis and Catarrh	832	891	530	2253
21	18	11	50	..... Pleurisy	54	58	30	142
18	23	17	58	.... Pneumonia ..				
7	5	2	14	.... Carbuncle	..	....	....	..
3551	4462	3634	11647	Accidents, and all other Diseases	3229	4323	3133	10685
4631	5622	4546	14799	..... TOTAL	4491	5727	4033	14251

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, JULY 26, 1862. [No. 104.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·841	29·753	29·816	—	29·905	29·899	
Highest } Unreduced	30·092	30·180	30·202	—	30·178	30·133	
Lowest } Unreduced	29·582	29·690	29·760	—	29·706	29·703	
Range	0·510	0·490	0·442	—	0·472	0·430	
Temperature.							
Adopted Mean	55·9	56·5	57·3	56·4	56·5	56·3	
Range for Week	12·0	28·7	30·5	27·4	27·8	30·6	
Daily Range	9·4	16·5	22·5	20·4	14·5	17·2	
Maximum in Shade	64·0	75·0	75·5	73·3	74·8	74·1	
Minimum in Shade	52·0	46·3	45·0	45·9	47·0	43·5	
Maximum in Sun	—	91·0	—	99·0	84·5	87·7	
Maximum in Sun: Black bulb in Vacuo	—	115·0	111·0	—	—	—	
Minimum on Grass	—	42·7	44·5	43·9	44·0	41·3	
Temperature in Ground at surface	—	54·23	56·83	—	—	—	
Temperature 6 inches below	—	54·88	56·84	—	—	—	
Temperature 12 inches below	—	56·12	58·57	—	—	—	
Temperature of Evaporation	51·4	53·0	53·6	52·6	54·1	51·8	
Temperature of Dew Point	47·2	49·8	50·2	49·1	51·9	47·6	
Temperature of Air—Dew Point	8·7	6·7	7·1	7·3	4·6	8·7	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·69	4·00	4·05	3·94	4·33	3·71	
Required to Saturate do	1·30	1·10	1·21	1·14	0·77	1·35	
Weight of a cubic foot of Air	535·5	533·1	533·5	533·4	535·6	536·3	
Degree of Humidity (Saturation—1,000)	0·729	0·780	0·771	0·736	0·846	0·725	
	INS.	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·49	4·95	5·03	4·82	5·34	4·56	
Elastic force of Vapour	0·325	0·358	0·364	0·349	0·386	0·330	
Clouds (Covered—10 Clear—0)	—	7·5	4·4	—	6·9	7·4	
Prevailing Winds	—	NW, SW.	SW.	SW	SW.	W, SW.	
Rain	—	0·064	0·180	0·012	0·155	0·111	
Days on which it fell	—	1	5	4	3	2	
Ozonometer.							
Moffat (0—10)	—	2·14	—	0·21	3·14	2·71	
Schonbein (0—10)	—	1·57	—	—	—	—	
	INS.	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·122	0·099	0·106	0·107	0·071	0·124	
Weekly Evaporation	0·854	0·693	0·742	0·749	0·497	0·868	

There were 4 barometric oscillations during the week, the amount being 1·248 inches. There were 5 temperature oscillations, the amount being 16·2°.

The mean temperature of the past week was 3·9° below the average of the last thirteen years; 4·2° below the corresponding week last year; and colder than any corresponding week during the last thirteen years.

The mean temperature was the highest at Sale and the lowest at the Royal Infirmary.

The degree of humidity was the highest at Thelwall and the least at Eccles.

Ozone occurred at Old Trafford upon 4 days; Bowdon 2 days; Thelwall 7 days; Eccles 6 days.

The weather, generally, during the week was fine but accompanied by a low night temperature; Strong winds prevailed during a good part of the week.

Old Trafford, Manchester,
July 31, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

New Cases of Disease coming under Treatment in Pauper, C

During the Week ending Saturd

MANCHESTER.

Area in Statute Acres ..... Manchester Township 1,645 .....
Population in 1861 ..... " " 185,050 .....

DISEASES.	Poor Law Districts.							Public Institutions.								
									Royal Infirmary.					Children		
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.	
	1	2	3	4	5	6		7	8	9	10	11	12	13	14	1
Small-pox	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	
Chicken-pox	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	
Measles	..	..	..	..	..	2	2	..	..	..	..	..	..	2	..	
Scarlatina	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Whooping-cough	..	4	..	2	..	3	9	..	..	..	..	..	..	1	2	
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diarrhœa	..	2	3	1	1	2	9	2	..	7	..	..	..	12	5	
Dysentery	..	..	..	2	..	..	2	..	..	3	..	..	1	..	..	
Continued Fever	2	2	..	2	..	2	8	4	..	..	1	1	..	8	..	
Erysipelas	..	..	..	..	..	..	..	..	..	2	..	1	1	..	..	
Rheumatism	..	3	4	..	..	1	8	5	2	9	1	..	..	1	..	
Neuralgic Affections	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	
Constitutional Syphilis	..	..	..	1	..	..	1	4	..	16	..	1	..	..	..	
Phthisis	..	..	..	1	..	3	4	2	2	16	2	..	1	2	..	
Insanity	1	..	..	..	..	..	1	4	..	..	..	..	..	..	..	
Bronchitis, Influenza & Catarrh	1	4	6	..	6	2	19	10	1	54	3	1	..	7	3	
Pleurisy and Pneumonia	..	..	..	..	..	..	..	3	..	..	1	..	..	..	3	
Skin Diseases	2	..	..	2	..	..	4	10	..	18	..	1	..	4	3	
Dyspepsia	1	..	..	..	1	2	4	4	..	19	1	..	..	2	..	
Accidents and diseases not classified	8	17	9	5	12	10	61	39	24	263	10	3	2	64	5	
TOTAL	15	32	22	16	21	28	134	88	29	408	19	8	5	103	21	

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

of July, 1862.

LFORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329			.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.
0,967.			.. 68,209. ..			.. 44,850 ..		21739	....	....	. ....	Population in 1861.
PUBLIC NSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	1	Small-pox
.	..	..	..	..	..	..	..	..	..	2	3	Chicken-pox
.	1	..	..	..	..	..	2	..	..	..	7	Measles
..	..	..	..	..	..	..	..	..	..	..	1	Scarlatina
.	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
.	1	..	..	..	..	..	2	2	2	1	21	Whooping-cough
.	..	..	..	..	1	..	..	..	..	..	1	Croup
.	3	6	..	2	3	..	1	..	3	3	57	Diarrhœa
1	..	..	3	..	..	2	..	..	..	1	13	Dysentery
..	1	..	..	..	..	..	2	..	..	..	25	Continued Fever
1	..	..	..	..	..	..	..	..	..	1	6	Erysipelas
.	5	2	1	..	1	..	3	1	2	3	46	Rheumatism
.	2	..	1	..	..	1	1	..	..	2	8	Neuralgic Affections
1	1	..	..	..	..	..	..	..	..	1	26	Constitutional Syphilis
1	3	..	..	..	..	..	2	1	1	2	40	Phthisis
..	..	..	..	..	..	..	..	..	..	1	6	Insanity
1	12	5	1	4	4	3	6	2	10	..	151	Bronchitis, Influenza, and Catarrah.
..	1	..	..	..	..	..	2	..	2	2	14	Pleurisy & Pneumonia.
10	3	..	..	..	1	1	1	..	3	4	63	Skin Disease.
..	5	..	..	..	1	..	1	..	8	1	49	Dyspepsia
8	60	4	5	3	6	8	29	2	29	5	640	Accidents and diseases not classified
23	98	17	11	9	17	15	52	8	60	29	1178	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,

(8) Mr. M. ROWLAND DAY,
(9) } Mr. W. J. MALLETT,
(10) } ,, W. H. HUGHES,
(11) } ,, C. H. BRADDON,
(12) }
(13) ,, H. RUNCORN,
(14) Dr. WHITEHEAD,

(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL
(18) ,, J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,

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(23) ,, W. B. MIDWOOD,
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(26) ,, A. F. PENNINGTON
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	1	..	..	..	..	..	1	..
Measles	..	1	1	..	..	1	..	..	1	..	..	4	2
Whooping-cough	1	..	..	..	..	1	1	1	..	..	..	4	No rtrn.
Scarlatina	..	..	..	..	1	..	..	..	..	..	..	1	2
Diarrhœa	1	4	2	1	3	1	..	..	..	1	..	13	53
Fever	1	..	1	..	..	1	..	..	..	1	†1	5	8
Diseases of the Lungs	5	6	1	6	..	4	3	..	..	7	2	34	39
Other causes	12	8	11	5	9	4	14	9	15	6	7	100	154
TOTAL NO. OF DEATHS.	20	19	16	12	13	13	18	10	16	15	10	162	258
TOTAL NO. OF BIRTHS.	48	39	26	33	19	32	15	20	27	56	15	330	325

* Return from Pendleton District commenced June 28.
† Gastric.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson,*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th April.	5 weeks ending 31st May.	4 Weeks ending 28th June.	TOTAL.	DISEASES.	4 Weeks ending 26th April.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	TOTAL.
1	2	..	3	.... Small-pox	3	12	19	34
3	18	3	24	.... Chicken-pox	9	12	5	26
37	71	31	139	..... Measles	31	40	42	113
18	17	13	48	.... Scarlatina	5	18	5	28
1	3	8	12	.... Diphtheria	..	4	3	7
50	67	31	148	.. Whooping-cough ..	128	112	56	296
1	2	1	4	..... Croup	5	3	3	11
172	331	355	858	.....Diarrhœa.. ...	112	152	130	394
2	3	..	5	.... Dysentery	21	35	26	82
..	....	1	1	..... Cholera	..	..	..	..
19	20	20	59	.... Erysipelas	20	24	14	58
1	1	..	2	.. Puerperal Fever ..	..	..	..	..
22	18	23	63	..... Insanity	42	43	37	122
707	561	396	1664	Bronchitis and Catarrh	832	891	530	2253
21	18	11	50	..... Pleurisy	54	58	30	142
18	23	17	58	... Pneumonia ..				
7	5	2	14	.... Carbuncle	..	....	....	..
3551	4462	3634	11647	Accidents, and all other Diseases	3229	4323	3133	10685
4631	5622	4546	14799	..... TOTAL	4491	5727	4033	14251

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HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, AUGUST 2, 1862. [No. 105.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	
Mean @ 32° F.	29·875	29·891		—	29·908	29·884	
Highest } Unreduced	30·060	30·080		—	30·106	30·066	
Lowest } Unreduced	29·850	29·840		—	29·860	29·814	
Range	0·210	0·240		—	0·246	0·252	
Temperature.							
Adopted Mean	56·0	57·5		56·6	57·1	57·3	
Range for Week	20·0	29·8		30·5	28·7	30·8	
Daily Range	13·1	20·0		20·8	17·0	18·9	
Maximum in Shade	69·0	72·8		71·0	71·3	70·5	
Minimum in Shade	49·0	43·0		40·5	42·6	39·7	
Maximum in Sun	—	91·7		101·0	84·0	84·4	
Maximum in Sun: Black bulb in Vacuo	—	114·0		—	—	—	
Minimum on Grass	—	40·0		—	40·0	37·4	
Temperature in Ground at surface	—	55·06		—	—	—	
Temperature 6 inches below	—	55·20		—	—	—	
Temperature 12 inches below	—	56·33		—	—	—	
Temperature of Evaporation	52·8	53·9		52·9	52·2	51·8	
Temperature of Dew Point	49·8	50·6		49·5	47·7	46·8	
Temperature of Air—Dew Point	6·2	6·9		7·1	9·4	10·5	
Hygrometrical condition of the Atmosphere	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	4·04	4·12		4·01	3·73	3·61	
Required to Saturate do	0·96	0·88		1·11	1·49	1·65	
Weight of a cubic foot of Air	535·8	534·6		535·6	535·4	534·8	
Degree of Humidity (Saturation—1,000)	0·798	0·779		0·774	0·706	0·678	
	INS.	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·95	5·10		4·91	4·58	4·44	
Elastic force of Vapour	0·358	0·369		0·355	0·331	0·321	
Clouds (Covered—10 Clear—0)	—	5·2		—	6·0	7·4	
Prevailing Winds	—	SE.		SW, S.	NW, SW, W.	W, SW.	
Rain	—	1·252		1·170	1·320	1·110	
Days on which it fell	—	3		3	3	3	
Ozonometer.							
Moffat (0—10)	—	3·43		1·86	5·28	2·43	
Schonbein (0—10)	—	1·00		—	—	—	
	INS.	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·091	0·104		0·104	0·136	0·149	
Weekly Evaporation	0·637	0·728		0·728	0·952	1·043	

NO RETURN.

NO RETURN.

There were 7 barometric oscillations during the week, the amount being 0·540 inches: this is the least amount of disturbance since the week ending 22nd June, 1861. There were 4 temperature oscillations, the amount being 10·4°.

The mean temperature of the past week was 3·2° below the average of the last thirteen years; and 2·5° below the corresponding week last year.

The mean temperature was the highest at Old Trafford and the lowest at the Royal Infirmary.

The degree of humidity was the highest at the Royal Infirmary and the least at Eccles.

Ozone occurred at Old Trafford upon 5 days; Bowdon 6 days; Thelwall 7 days; and Eccles 7 days.

The rain fall during July, at the various Stations, has been as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	4·527	21
Bowdon	3·620	21
Thelwall	3·997	17
Eccles	4·017	21

Old Trafford, Manchester,
August 6, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Satu

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... „ „ 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	..	..	..	*4	..	4	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1	..	..	1	..	..	2	..	..	..	..	..	..	3	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	..	..	1	1	..	..	..	..	..	..	2	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa.....	..	1	5	2	6	2	16	..	..	11	..	..	..	19	5
Dysentery	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Continued Fever.....	1	..	..	3	..	4	8	3	2	3	1	2	1	5	..
Erysipelas	2	..	..	..	..	..	2	..	..	1	..	..	..	1	..
Rheumatism	3	2	3	1	2	..	11	3	..	40	1	4	2	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	1	3	..	1	..	1	1
Constitutional Syphilis	..	..	2	..	..	..	2	6	..	10	1	..	1	1	..
Phthisis	1	1	..	..	..	1	3	2	..	20	..	2	1	3	..
Insanity	..	..	..	1	..	1	2	3	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	..	..	2	2	11	1	16	4	..	37	..	6	..	8	2
Pleurisy and Pneumonia....	..	..	..	..	1	..	1	..	1	..	..	..	1	..	..
Skin Diseases.....	..	..	..	..	..	..	..	10	..	10	..	..	..	4	5
Dyspepsia	1	..	..	..	1	3	5	3	..	17	..	1	..	4	2
Accidents and diseases not classified.....	13	25	10	5	11	5	69	39	32	247	8	10	6	49	5
TOTAL	22	29	22	15	36	18	142	73	36	400	11	26	12	101	22

* 2 not vaccinated.

ANITARY ASSOCIATION.

l Public Institutions of Manchester and adjoining Districts,

ay of August, 1862.

ALFORD.			HULME.			CHORL-TON.		ARD-WICK				
1,329	....		.... 477.	....		.. 646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....		.. 68,209.	..		.. 44,850	..	21739	....	....	....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Work-house.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	4	Small-pox
..	1	..	..	..	..	..	..	..	..	..	1	Chicken-pox
..	..	..	..	1	..	..	1	..	..	..	7	Measles
..	2	..	..	..	..	..	..	..	..	..	3	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	5	..	..	..	..	..	..	..	..	..	9	Whooping-cough
..	..	..	..	..	1	..	..	..	..	..	1	Croup
..	9	4	1	3	6	1	4	..	4	2	88	Diarrhœa
.	3	..	..	..	..	4	1	1	..	..	11	Dysentery
..	2	..	..	..	2	1	..	..	..	1	31	Continued Fever
..	..	..	..	..	..	..	1	1	..	1	7	Erysipelas
2	5	..	..	2	..	..	2	1	3	1	81	Rheumatism
..	2	..	..	..	1	..	..	1	1	2	14	Neuralgic Affections
..	1	..	..	..	..	1	2	..	2	..	28	Constitutional Syphilis
..	8	..	..	..	..	..	2	..	1	..	43	Phthisis
1	..	..	..	..	..	..	..	..	..	2	8	Insanity
4	21	4	2	2	6	1	4	..	8	3	133	Bronchitis, Influenza, and Catarrah.
1	1	..	..	..	..	..	1	..	..	..	7	Pleurisy & Pneumonia.
..	3	1	1	1	2	2	1	1	2	4	50	Skin Disease.
..	4	1	2	..	..	..	4	3	7	3	59	Dyspepsia
11	44	3	4	6	3	2	36	3	34	4	629	Accidents and diseases not classified
19	111	13	10	15	21	12	59	11	62	23	1214	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) (10) (11) (12) Mr. W. J. MALLETT, ,, W. H. HUGHES, ,, C. H. BRADDON,
(13) ,, H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
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(22) Mr. H. M. WILLIAMSON.
(23) ,, W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	1	..	..	..	..	..	1	2
Whooping-cough	1	..	1	1	..	..	1	1	1	1	..	7	9
Scarlatina	..	..	..	..	..	..	..	..	..	1	..	1	..
Diarrhœa	..	2	..	1	2	..	..	..	..	3	1	9	63
Fever	..	1	1	..	†1	..	1	..	..	..	..	4	3
Diseases of the Lungs	7	7	2	2	..	7	..	..	5	7	4	41	32
Other causes	10	8	17	7	6	5	7	7	‡12	18	3	100	113
TOTAL No. OF DEATHS.	18	18	21	11	9	13	9	8	18	30	8	163	222
TOTAL No. OF BIRTHS.	35	29	20	15	22	30	21	25	39	46	18	300	339

* Return from Pendleton District commenced June 28.
† Typhus. ‡ English Cholera: 48 hours.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th April.	5 weeks ending 31st May.	4 Weeks ending 28th June.	TOTAL.	DISEASES.	4 Weeks ending 26th April.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	TOTAL.
1	2	..	3	.... Small-pox	3	12	19	34
3	18	3	24	.... Chicken-pox	9	12	5	26
37	71	31	139	..... Measles	31	40	42	113
18	17	13	48	.... Scarlatina	5	18	5	28
1	3	8	12	.... Diphtheria	..	4	3	7
50	67	31	148	.. Whooping-cough ..	128	112	56	296
1	2	1	4	..... Croup	5	3	3	11
172	331	355	858	.....Diarrhœa.. ...	112	152	130	394
2	3	..	5	.... Dysentery	21	35	26	82
..	....	1	1	..... Cholera	..	..	..	..
19	20	20	59	.... Erysipelas	20	24	14	58
1	1	..	2	.. Puerperal Fever ..	..	..	..	..
22	18	23	63	..... Insanity	42	43	37	122
707	561	396	1664	Bronchitis and Catarrh	832	891	530	2253
21	18	11	50	..... Pleurisy	54	58	30	142
18	23	17	58	.. Pneumonia ..				
7	5	2	14	.... Carbuncle	..	....	....	..
3551	4462	3634	11647	Accidents, and all other Diseases	3229	4323	3133	10685
4631	5622	4546	14799	..... TOTAL	4491	5727	4033	14251

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER.

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, AUGUST 9, 1862. [No. 106.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	INS.	
Mean @ 32° F.	29·485	29·536	NO RETURN.	—	29·559	29·524	NO RETURN.
Highest (Unreduced)	30·010	30·016		—	30·040	29·983	
Lowest (Unreduced)	29·208	29·202		—	29·226	29·192	
Range	0·802	0·814		—	0·814	0·791	
Temperature.							
Adopted Mean	56·9	58·6		57·8	57·0	56·7	
Range for Week	16·0	22·8		35·2	20·5	26·6	
Daily Range	10·0	15·4		20·6	13·3	15·4	
Maximum in Shade	68·0	70·8		79·0	68·0	71·1	
Minimum in Shade	52·0	48·0		43·8	47·5	44·5	
Maximum in Sun	—	96·2		98·0	82·3	89·4	
Maximum in Sun: Black bulb in Vacuo	—	108·2		—	—	—	
Minimum on Grass	—	42·0		43·7	43·5	43·0	
Temperature in Ground at surface	—	55·91		—	—	—	
Temperature 6 inches below	—	56·12		—	—	—	
Temperature 12 inches below	—	57·21		—	—	—	
Temperature of Evaporation	52·9	54·8		54·7	52·9	52·2	
Temperature of Dew Point	48·4	51·4		52·0	49·2	48·0	
Temperature of Air—Dew Point	8·5	7·2		5·8	7·8	8·7	
Hygrometrical condition of the Atmosphere	GRS.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·79	4·28		4·33	3·89	3·79	
Required to Saturate do	1·59	1·24		1·03	1·32	1·35	
Weight of a cubic foot of Air	527·1	527·0		528·0	529·3	529·0	
Degree of Humidity (Saturation—1,000)	0·709	0·770		0·812	0·745	0·727	
	INS.	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·70	5·24		5·37	4·85	4·63	
Elastic force of Vapour	0·340	0·379		0·388	0·351	0·335	
Clouds (Covered—10 Clear—0)	—	5·4		—	5·0	6·3	
Prevailing Winds	—	SE,S.		SW,W,S.	S,W.	SW,W.	
Rain	—	2·054		2·570	2·512	1·951	
Days on which it fell	—	5		5	4	6	
Ozonometer.							
Moffat (0—10)	—	3·00		2·00	6·28	3·71	
Schonbein (0—10)	—	2·43		—	—	—	
	INS.	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·124	0·113		0·091	0·114	0·126	
Weekly Evaporation	0·868	0·791		0·637	0·798	0·882	

There were 3 barometric oscillations during the week, the amount being 1·561 inches. There were 3 temperature oscillations, the amount being 15·6°.

The mean temperature of the past week was 2·0° below the average of the last thirteen years; and 4·0° below the corresponding week last year.

The mean temperature was the highest at Old Trafford and the lowest at Eccles.

The degree of humidity was the highest at Bowdon, and the least at the Royal Infirmary.

Ozone occurred at Old Trafford upon 4 days; Bowdon 4 days; Thelwall 7 days; and Eccles 7 days.

The fall of rain during the week has been very large, the largest amounts having fallen in the neighbourhood of Bowdon and Thelwall.

Old Trafford, Manchester,
August 12, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Sat

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital 14
Small-pox	..	..	..	..	*1	..	1	3	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	1	1	..	..	..	..	..	..	1	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	..	..	..	..	4	4	..	..	..	..	..	..	1	1
Croup	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Diarrhœa.....	..	4	4	..	6	4	18	4	..	2	1	3	..	20	9
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Continued Fever.....	1	..	1	6	..	1	9	1	2	..	2	1	..	4	..
Erysipelas	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..
Rheumatism	2	2	4	1	2	2	13	2	..	5	..	2	3	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	6	..	..	..	1	1
Constitutional Syphilis	..	..	..	..	..	..	..	4	..	8	..	1	1	5	1
Phthisis	1	..	1	..	..	..	2	3	..	18	1	1	..	1	2
Insanity	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	..	5	5	1	14	5	30	14	..	29	4	4	..	4	3
Pleurisy and Pneumonia....	..	..	2	..	..	..	2	..	1	..	..	..	1	..	..
Skin Diseases.....	..	1	2	..	..	1	4	8	..	10	..	..	..	5	2
Dyspepsia	..	3	1	..	..	2	6	2	1	25	1	..	..	2	2
Accidents and diseases not classified.....	12	10	4	9	15	10	60	22	32	255	1	6	8	44	2
TOTAL	17	25	24	17	38	32	153	67	36	359	10	18	13	90	23

* Vaccinated.

NITARY ASSOCIATION.

Public Institutions of Manchester and adjoining Districts,

y of August, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....	....	477.	....	..	646.	..	508.	....	....	.....	Area in Statute Acres.
70,967.	....	..	68,209.	..	..	44,850	..	21739	....	....	....	Population in 1861.
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	1	..	5	Small-pox
..	..	..	..	..	..	..	..	..	..	2	3	Chicken-pox
..	..	..	..	..	2	..	1	..	1	..	6	Measles
..	3	..	..	..	..	..	..	..	..	..	4	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	4	..	..	..	1	..	1	..	2	1	15	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	1	Croup
..	7	6	2	2	2	2	7	1	3	4	95	Diarrhœa
.	..	..	1	..	..	..	..	..	..	3	5	Dysentery
..	2	..	2	..	..	1	†1	..	1	..	26	Continued Fever
..	..	..	..	..	..	..	2	1	..	..	5	Erysipelas
3	3	1	1	..	..	..	..	..	2	2	38	Rheumatism
..	3	..	..	..	..	1	1	2	2	1	18	Neuralgic Affections
..	2	..	1	..	..	..	..	..	1	3	29	Constitutional Syphilis
..	5	..	..	..	..	1	2	..	..	2	38	Phthisis
1	..	..	..	..	..	..	..	..	..	2	7	Insanity
8	27	3	1	4	5	3	2	1	8	2	153	Bronchitis, Influenza, and Catarrah.
..	1	..	..	..	..	..	..	..	1	..	6	Pleurisy & Pneumonia.
1	3	..	..	1	2	..	..	..	2	3	43	Skin Disease.
..	8	1	..	2	1	1	2	1	9	2	70	Dyspepsia
4	59	3	1	2	5	7	35	1	29	‡13	604	Accidents and diseases not classified
17	127	14	9	11	18	16	54	7	62	40	1171	TOTAL.

† Typhus. ‡ 10 cases of Opthalmia.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	1	..	..	..	1	..	1	..	..	..	..	3	2
Whooping-cough	..	..	..	..	1	2	1	..	..	2	..	6	9
Scarlatina	..	2	..	..	..	..	..	..	..	1	..	3	..
Diarrhœa	6	1	3	..	3	3	3	..	1	4	1	25	63
Fever	..	..	..	..	..	..	..	1	1	..	..	2	3
Diseases of the Lungs	4	4	1	1	..	5	6	..	2	10	..	33	32
Other causes	9	8	17	6	13	4	8	4	8	18	2	97	113
TOTAL NO. OF DEATHS.	20	15	21	7	18	14	19	5	12	35	3	169	222
TOTAL NO. OF BIRTHS.	49	28	14	16	21	29	20	3	22	38	21	261	339

* Return from Pendleton District commenced June 28.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th April.	5 weeks ending 31st May.	4 Weeks ending 28th June.	TOTAL.	DISEASES.	4 Weeks ending 26th April.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	TOTAL.
1	2	..	3	.... Small-pox	3	12	19	34
3	18	3	24	.... Chicken-pox	9	12	5	26
37	71	31	139	..... Measles	31	40	42	113
18	17	13	48	.... Scarlatina ...	5	18	5	28
1	3	8	12	.... Diphtheria	..	4	3	7
50	67	31	148	.. Whooping-cough ..	128	112	56	296
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172	331	355	858	.....Diarrhœa.. ...	112	152	130	394
2	3	..	5	.... Dysentery	21	35	26	82
..	....	1	1	..... Cholera	..	..	..	..
19	20	20	59	.... Erysipelas	20	24	14	58
1	1	..	2	.. Puerperal Fever ..	..	..	..	..
22	18	23	63	..... Insanity ...	42	43	37	122
707	561	396	1664	Bronchitis and Catarrh	832	891	530	2253
21	18	11	50	..... Pleurisy	54	58	30	142
18	23	17	58	... Pneumonia ..				
7	5	2	14	.... Carbuncle	..	....	....	..
3551	4462	3634	11647	Accidents, and all other Diseases	3229	4323	3133	10685
4631	5622	4546	14799	..... TOTAL	4491	5727	4033	14251

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Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Mancheste .

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, AUGUST 16, 1862. [No. 107.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq	Ollerenshaw, A. Neild, Esq.
Barometer.					INS.	INS.	
Mean @ 32° F.					29·808	29·777	
Highest (Unreduced)					30·108	30·050	
Lowest (Unreduced)					29·680	29·614	
Range					0·428	0·436	
Temperature.							
Adopted Mean					57·8	57·5	
Range for Week					21·0	23·1	
Daily Range					11·1	13·2	
Maximum in Shade					68·0	70·1	
Minimum in Shade					47·0	47·0	
Maximum in Sun					98·0	85·1	
Maximum in Sun: Black bulb in Vacuo					—	—	
Minimum on Grass					46·0	45·8	
Temperature in Ground at surface					—	—	
Temperature 6 inches below					—	—	
Temperature 12 inches below					—	—	
Temperature of Evaporation					55·2	55·1	
Temperature of Dew Point					52·9	52·9	
Temperature of Air—Dew Point					4·9	4·6	
Hygrometrical condition of the Atmosphere.					GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	NO RETURN	NO RETURN	NO RETURN	NO RETURN.	4·48	4·48	NO RETURN.
Required to Saturate do					0·88	1·02	
Weight of a cubic foot of Air					532·4	532·2	
Degree of Humidity (Saturation—1,000)					0·810	0·846	
					INS.	INS.	
Water in a vertical column of the Atmosphere					5·55	5·55	
Elastic force of Vapour					0·401	0·401	
Clouds (Covered—10 Clear—0)					7·9	8·7	
Prevailing Winds					SW., N.W.	SW,	
Rain					0·234	0·158	
Days on which it fell					5	4	
Ozonometer.							
Moffat (0—10)					5·00	0·85	
Schonbein (0—10)					—	—	
					INS.	INS.	
Daily Evaporation					0·078	0·072	
Weekly Evaporation					0·546	0·504	

The temperature of the past week has been rather below the average for the season, and accompanied by partial under storms at some of the stations.

Ozone occurred upon 5 days at Thelwall and 2 days at Eccles.

G. V. VERNON, F.R.A.S.

DERMERE,
August 22, 1862.

MANCHESTER AND SAL

New Cases of Disease coming under Treatment in Pauper,

During the Week ending Satu

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Whooping-cough	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	2	3	3	3	4	6	21	3	..	20	1	1	..	31	6
Dysentery	1	1	..	2	..	..	4	..	..	1	..	..	..	..	..
Continued Fever	2	4	..	..	1	2	9	4	3	1	1	2	..	7	..
Erysipelas	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..
Rheumatism	1	5	1	3	5	..	15	6	1	39	..	2	..	1	..
Neuralgic Affections	..	..	..	..	1	..	1	..	..	2	2	..	..	1	2
Constitutional Syphilis	..	..	..	..	..	..	..	3	..	20	..	..	..	2	4
Phthisis	..	2	..	..	..	..	2	4	..	28	1	3	1	2	1
Insanity	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	1	3	5	2	3	2	16	6	..	90	3	5	..	12	2
Pleurisy and Pneumonia	1	..	1	..	..	..	2	..	..	..	..	..	1	..	2
Skin Diseases	..	2	..	..	2	2	6	7	..	8	..	..	..	2	3
Dyspepsia	..	2	..	1	2	..	5	2	..	38	1	1	..	6	4
Accidents and diseases not classified	9	8	7	17	10	7	58	32	24	298	8	16	7	42	2
TOTAL	17	30	17	28	28	19	139	68	29	547	19	30	9	110	28

NITARY ASSOCIATION.

l Public Institutions of Manchester and adjoining Districts,

day of August, 1862.

ALFORD.			HULME.			CHORLTON.		ARDWICK				
1,329	....	....	477.	....	..	646.	..	508.	....	...	.....	Area in Statute Acres.
70,967.	....	..	68,209.	..	..	44,850	..	21739	....	....	....	Population in 1861.
Public Institutions.			Poor Law Districts.									
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27		
..	..	..	..	..	..	..	..	..	..	..	2	Small-pox
..	..	..	..	..	..	..	..	..	..	2	2	Chicken-pox
..	..	..	..	1	5	2	..	..	1	..	11	Measles
..	2	..	..	..	..	..	..	..	..	..	4	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	1	Diphtheria
..	2	..	..	..	..	..	1	..	..	1	7	Whooping-cough
..	..	..	..	..	..	..	..	..	..	..	..	Croup
..	1	8	6	7	5	2	8	..	2	2	125	Diarrhœa
.	4	..	..	..	..	..	..	1	..	3	13	Dysentery
..	..	..	..	..	..	..	1	..	2	..	32	Continued Fever
..	..	..	..	..	..	..	..	..	1	..	3	Erysipelas
1	2	1	..	..	1	..	4	1	3	3	81	Rheumatism
..	2	..	..	..	..	1	1	..	1	1	15	Neuralgic Affections
..	3	..	..	..	..	..	..	..	..	1	33	Constitutional Syphilis
..	7	..	..	..	2	1	1	..	..	2	55	Phthisis
2	..	..	..	1	..	..	..	..	..	..	5	Insanity
6	12	6	..	..	4	2	6	1	4	2	178	Bronchitis, Influenza, and Catarrah.
..	4	..	..	..	..	..	1	..	1	..	11	Pleurisy & Pneumonia.
..	3	..	2	..	..	..	1	..	2	3	37	Skin Disease.
..	6	..	..	3	2	2	3	..	6	..	83	Dyspepsia
7	67	2	3	4	2	4	*35	5	32	12	681	Accidents and diseases not classified
16	115	17	11	16	21	14	62	8	55	32	1379	TOTAL.

Medical Officers to whom the Association is indebted for the annexed Returns.

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,
(8) Mr. M. ROWLAND DAY,
(9) Mr. W. J. MALLETT,
(10) ,, W. H. HUGHES,
(11) ,, C. H. BRADDON,
(12)
(13) ,, H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL
(18) ,, J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.
(23) ,, W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J.V.L. WESTMACOTT

* 4 cases of Opthalmia.

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Choriton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	1	..	..	1	2	..	4	3
Whooping-cough	..	..	..	..	..	3	1	..	..	..	1	5	5
Scarlatina	..	2	..	..	2	..	..	..	..	..	..	4	..
Diarrhœa	2	3	3	2	1	3	..	..	1	4	1	20	75
Fever	..	..	..	..	1	..	..	..	..	..	1	2	6
Diseases of the Lungs	11	6	2	4	..	3	4	..	2	4	2	38	37
Other causes	6	3	25	10	8	†6	7	5	4	14	..	88	114
TOTAL NO. OF DEATHS.	19	14	30	16	12	16	12	5	8	24	5	161	240
TOTAL NO. OF BIRTHS.	38	47	21	15	16	28	34	26	30	66	18	339	302

* Return from Pendleton District commenced June 28. †2 Inquests

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 31st May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.	DISEASES.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	4 Weeks ending 26th July..	TOTAL.
2	..	1	3	.... Small-pox	12	19	9	40
18	3	2	23	.... Chicken-pox	12	5	7	24
71	31	25	127	..... Measles	40	42	36	118
17	13	14	44	.... Scarlatina	18	5	12	35
3	8	7	18	.... Diphtheria	4	3	..	7
67	31	26	124	.. Whooping-cough ..	112	56	55	223
2	1	2	5	..... Croup	3	3	6	12
331	355	567	1253	.....Diarrhœa.. ...	152	130	228	510
3	..	4	7	.... Dysentery	35	26	47	108
....	1	2	3	..... Cholera	..	..	..	..
20	20	17	57	.... Erysipelas	24	14	17	55
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
18	23	14	55	..... Insanity	43	37	33	113
561	396	385	1342	Bronchitis and Catarrh	891	530	548	1969
18	11	15	44	..... Pleurisy	58	30	57	145
23	17	23	63	... Pneumonia ..				
5	2	2	9	.... Carbuncle	....	....	..	..
4462	3634	3313	11409	Accidents, and all other Diseases	4323	3133	3404	10860
5622	4546	4419	14587	..... TOTAL	5727	4033	4459	14219

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Powlson and Sons, Printers Bow Street, John Dalto ✧ Street, Mancheste.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, AUGUST 23, 1862. [No. 108.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.			INS.	INS.	INS.	
Mean @ 32° F.	29·811			—	29·863	29·839	
Highest (Unreduced)	30·060			—	30·162	30·118	
Lowest (Unreduced)	29·816			—	29·838	29·803	
Range	0·244			—	0·324	0·315	
Temperature.							
Adopted Mean	56·8			57·5	57·5	57·6	
Range for Week	21·0			29·0	28·8	29·5	
Daily Range	11·3			17·6	15·7	17·5	
Maximum in Shade	72·0			71·0	73·3	73·3	
Minimum in Shade	51·0			42·0	44·5	43·8	
Maximum in Sun	—			98·0	95·5	91·6	
Maximum in Sun: Black bulb in Vacuo	—			—	—	—	
Minimum on Grass	—			43·3	43·2	42·1	
Temperature in Ground at surface	—			—	—	—	
Temperature 6 inches below	—			—	—	—	
Temperature 12 inches below	—			—	—	—	
Temperature of Evaporation	54·3			54·9	54·3	53·5	
Temperature of Dew Point	52·0			52·6	51·4	49·8	
Temperature of Air—Dew Point	4·8			4·9	6·3	7·8	
Hygrometrical condition of the Atmosphere.	GRS.			GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	4·33			4·42	4·24	4·14	
Required to Saturate do	0·83			0·88	1·06	1·33	
Weight of a cubic foot of Air	533·6			532·8	533·9	533·5	
Degree of Humidity (Saturation—1,000)	0·840			0·839	0·803	0·750	
	INS.			INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	5·37			5·49	5·24	4·95	
Elastic force of Vapour	0·388			0·397	0·379	0·358	
Clouds (Covered—10 Clear—0)	—			—	6·4	6·8	
Prevailing Winds	—			SW, NE.	S., NW.	SW.	
Rain	—			0·060	0·120	0·091	
Days on which it fell	—			3	5	4	
Ozonometer.							
Moffat (0—10)	—			0·28	4·28	1·71	
Schonbein (0—10)	—			—	—	—	
	INS.			INS.	INS.	INS.	
Daily Evaporation	0·074			0·076	0·094	0·117	
Weekly Evaporation	0·518			0·532	0·658	0·819	

NO RETURN. NO RETURN NO RETURN.

There has been a very small amount of barometric disturbance during the past week.

The mean temperature has been about the average for the season.

Ozone occurred upon 2 days at Bowdon; 7 days at Thelwall; and 5 days at Eccles.

The weather has generally been favourable for harvest prospects during the past fortnight, the fall of rain having shown a considerable falling off, as compared with the previous periods.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester,
August 29, 1862.

MANCHESTER AND SAL

Returns from Pauper, Charitable, and Public Institutions of Manchester and
Saturday, th

MANCHESTER.

Area in Statute Acres ..... Manchester Township 1,645 .....
Population in 1861 ..... „ „ 185,050 .....

DISEASES.	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Childr	
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical
	1	2	3	4	5	6		7	8	9	10	11	12	13	1
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Chicken-pox	..	2	..	..	1	..	3	..	..	..	..	..	..	..	.
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	1	.
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Diphtheria	..	..	..	..	..	2	2	1	..	..	..	..	..	1	.
Whooping-cough	..	..	..	..	2	..	2	..	..	..	..	..	..	3	
Croup	..	..	1	..	..	..	1	..	..	..	..	..	..	1	.
Diarrhœa	3	3	4	3	2	3	18	6	..	2	2	1	..	22	1
Dysentery	1	..	..	..	..	..	1	..	..	1	..	..	..	..	
Continued Fever	..	..	4	3	..	2	9	1	..	..	..	2	..	5	..
Erysipelas	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..
Rheumatism	..	3	2	7	2	1	15	3	1	12	..	1	..	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..
Constitutional Syphilis	..	..	1	..	..	..	1	3	..	7	..	..	..	..	1
Phthisis	..	3	..	1	..	1	5	..	1	16	2	2	..	1	..
Insanity	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	1	8	6	4	11	4	34	7	1	32	..	1	3	4	1
Pleurisy and Pneumonia	..	1	1	..	..	..	2	1	..	..	..	1	3	..	..
Skin Diseases	..	..	..	1	..	1	2	8	..	24	..	1	..	3	3
Dyspepsia	..	1	..	1	..	2	4	6	1	32	..	2	8	1	1
Accidents and diseases not classified	11	15	9	14	11	12	72	33	32	253	9	19	..	47	6
TOTAL	16	36	28	34	29	28	171	71	36	*384	14	30	15	89	24

* The deaths amongst these patients are not recorded in column 28.

Medical Officers to whom the Associatio

(1) Mr. R. M. MANN.
(2) „ T. W. DYSON,
(3) „ JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) „ EVAN THOMAS,
(7) „ J. BROADBENT,
(8) „ M. ROWLAND DAY,
(9), (10) Mr. W. J. MALLETT,
(11) „ W. H. HUGHES,
(12) „ C. H. BRADDON,

ANITARY ASSOCIATION.

cts.—New Cases of Disease coming under Treatment During the Week ending August, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK					
... 1,329				.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.	
.... 70,967.				.. 68,209. ..			.. 44,850 ..		21739	....	....	....	Population in 1861.	
Poor Law Dis.	Public Institutions.			Poor Law Districts.										
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.	Deaths.
16	17	18	19	20	21	22	23	24	25	26	27			28
..	..	..	..	..	..	..	..	†1	..	..	..	1	Small-pox	..
..	7	..	..	..	..	..	..	1	..	..	..	11	Chicken-pox	..
..	..	..	..	..	..	1	1	1	..	..	..	4	Measles	..
..	..	2	..	..	1	..	..	..	..	..	..	3	Scarlatina	1
..	..	..	..	..	..	..	..	..	..	..	..	4	Diphtheria	2
..	..	..	..	..	..	2	..	1	..	2	1	12	Whooping-cough	4
..	..	..	..	1	..	..	..	..	..	..	..	3	Croup	2
2	..	3	4	2	1	6	..	9	3	3	3	100	Diarrhœa	3
1	.	7	..	..	..	..	1	..	..	..	..	12	Dysentery	2
1	..	2	..	2	..	1	..	1	1	..	..	26	Continued Fever	1
..	..	..	..	..	..	1	..	..	..	..	..	4	Erysipelas	..
3	..	2	2	..	..	..	1	3	1	2	..	46	Rheumatism	1
..	..	1	..	..	..	..	..	..	..	..	2	7	Neuralgic Affections ..	..
..	1	2	1	..	..	..	..	..	..	1	2	20	Constitutional Syphilis	..
..	..	6	..	..	..	..	..	2	1	..	1	37	Phthisis	4
..	1	..	..	..	..	..	..	..	..	..	..	3	Insanity	..
11	5	11	3	2	2	4	..	2	5	9	..	137	Bronchitis, Influenza, and Catarrah	6
..	..	1	..	..	..	..	..	1	..	1	..	10	Pleurisy & Pneumonia.	1
1	2	1	..	..	..	1	1	1	1	..	3	52	Skin Disease.....	..
..	..	12	2	..	1	4	1	4	3	10	3	96	Dyspepsia	..
12	5	82	2	2	5	3	5	37	5	32	3	668	Accidents and diseases not classified.....	17
31	21	132	14	9	10	23	10	64	20	60	18	1256	TOTAL..... ...	44

†Vaccinated.

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL
(18) Mr. J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.
(23) Mr. W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	1
Measles	..	..	..	..	1	1	..	..	..	..	..	2	5
Whooping-cough	..	..	..	..	..	1	1	..	..	2	..	4	6
Scarlatina	..	2	..	..	..	..	..	..	1	1	..	4	1
Diarrhœa	5	1	2	5	1	2	2	1	4	2	1	26	90
Fever	..	1	..	1	..	..	..	..	..	1	..	3	4
Diseases of the Lungs	2	2	..	2	..	8	3	..	5	12	..	34	32
Other causes	10	10	22	4	17	3	8	5	8	12	7	106	112
TOTAL NO. OF DEATHS.	17	16	24	12	19	15	14	6	18	30	8	179	251
TOTAL NO. OF BIRTHS.	32	47	20	15	20	32	29	7	34	54	20	310	295

* Return from Pendleton District commenced June 28.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 31st May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.	DISEASES.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.
2	..	1	3	.... Small-pox	12	19	9	40
18	3	2	23	.... Chicken-pox	12	5	7	24
71	31	25	127	..... Measles	40	42	36	118
17	13	14	44	.... Scarlatina	18	5	12	35
3	8	7	18	.... Diphtheria	4	3	..	7
67	31	26	124	.. Whooping-cough ..	112	56	55	223
2	1	2	5	..... Croup	3	3	6	12
331	355	567	1253	.....Diarrhœa.. ...	152	130	228	510
3	..	4	7	.... Dysentery	35	26	47	108
....	1	2	3	..... Cholera	..	..	..	..
20	20	17	57	.... Erysipelas	24	14	17	55
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
18	23	14	55	..... Insanity	43	37	33	113
561	396	385	1342	Bronchitis and Catarrh	891	530	548	1969
18	11	15	44	..... Pleurisy	58	30	57	145
23	17	23	63	... Pneumonia ..				
5	2	2	9	.... Carbuncle	....	....	..	..
4462	3634	3313	11409	Accidents, and all other Diseases	4323	3133	3404	10860
5622	4546	4419	14587	..... TOTAL	5727	4033	4459	14219

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Mancheste.

HEALTH AND METEOROLOGY OF MANCHESTER.

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, AUGUST 30, 1862. [No. 109.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Sale, J. Curtis, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.			INS.	INS.	INS.	
Mean @ 32° F.	29·976			—	30·000	29·996	
Highest (Unreduced)	30·226			—	30·260	30·226	
Lowest (Unreduced)	29·938			—	29·940	29·900	
Range	0·288			—	0·320	0·326	
Temperature.							
Adopted Mean	57·7			57·9	58·1	57·3	
Range for Week	20·0			26·3	29·3	29·7	
Daily Range	12·4			17·5	20·0	19·0	
Maximum in Shade	71·0			71·3	73·0	71·9	
Minimum in Shade	51·0			45·0	43·7	42·2	
Maximum in Sun	—			100·4	98·4	88·8	
Maximum in Sun: Black bulb in Vacuo	—			—	—	—	
Minimum on Grass	—			42·0	42·5	39·8	
Temperature in Ground at surface	—			—	—	—	
Temperature 6 inches below	—			—	—	—	
Temperature 12 inches below	—			—	—	—	
Temperature of Evaporation	54·8			54·5	53·5	52·8	
Temperature of Dew Point	52·2			51·5	49·4	48·7	
Temperature of Air—Dew Point	5·5			6·4	8·7	8·6	
Hygrometrical condition of the Atmosphere.	GRS.			GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	4·37	NO RETURN.	NO RETURN	4·26	3·94	3·83	NO RETURN.
Required to Saturate do	0·97			1·12	1·48	1·43	
Weight of a cubic foot of Air	535·8			536·0	536·4	536·9	
Degree of Humidity (Saturation—1,000)	0·823			0·805	0·730	0·728	
	INS.			INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·58			5·27	4·88	4·76	
Elastic force of Vapour	0·391			0·381	0·353	0·344	
Clouds (Covered—10 Clear—0)	—			—	5·7	7·3	
Prevailing Winds	—			SE,NE.	SE,E.	E.	
Rain	—			0·000	0·010	0·000	
Days on which it fell	—			0	2	0	
Ozonometer.							
Moffat (0—10)	—			0·64	4·93	0·00	
Schonbein (0—10)	—			—	—	—	
	INS.			INS.	INS.	INS.	
Daily Evaporation	0·086			0·099	0·130	0·126	
Weekly Evaporation	0·602			0·693	0·910	0·882	

The amount of barometric disturbance during the past week has been but small.

The mean temperature of the week was about the average.

Ozone occurred upon 2 days at Bowdon, and 7 days at Thelwall; whilst at Eccles none was found, caused no doubt principally by the prevalence of easterly winds.

G. V. VERNON, F.R.A.S.

Old Trafford, Manchester,
September 3, 1862.

MANCHESTER AND SALI

Returns from Pauper, Charitable, and Public Institutions of Manchester and ad

Saturday, the

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
Diphtheria	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..
Whooping-cough	..	3	..	..	..	..	3	..	..	2	..	..	..	3	..
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	3	3	9	7	4	4	30	4	..	10	..	..	..	39	8
Dysentery	..	1	..	2	..	..	3	..	..	2	..	..	1	1	..
Continued Fever	..	3	..	2	..	..	5	2	..	..	1	..	..	9	..
Erysipelas	..	..	..	1	..	..	1	..	..	5	1	..	2	..	..
Rheumatism	..	4	2	3	2	..	11	4	..	12	1	..	..	1	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Constitutional Syphilis	1	..	..	..	..	2	3	3	..	16	..	1	..	1	1
Phthisis	1	..	1	..	..	..	2	2	..	26	2	1	..	1	..
Insanity	..	..	..	2	..	1	3	3	..	..	1	..	..	..	..
Bronchitis, Influenza & Catarrh	2	5	3	3	9	5	27	8	1	28	3	2	4	16	2
Pleurisy and Pneumonia	3	1	..	1	..	..	5	..	..	1	..	..	..	3	3
Skin Diseases	3	3	..	..	1	3	10	9	..	26	..	..	..	9	3
Dyspepsia	2	..	..	2	1	2	7	3	..	20	2	..	1	5	1
Accidents and diseases not classified	12	13	9	8	8	7	57	32	28	254	6	11	5	37	2
TOTAL	27	36	24	31	26	26	170	70	29	402 *	17	18	13	127	23

* The deaths amongst these patients are not recorded in column 28.

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,
(8) ,, M. ROWLAND DAY,

(9), (10) Mr. W. J. MALLETT,
(11) ,, W. H HUGHES,
(12) ,, C. H. BRADDON,

NITARY ASSOCIATION.

ts.—*New Cases of Disease coming under Treatment During the Week ending ugust*, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK				
... 1,329				.... 477.			.. 646. ..		508.	....	....	.....	Area in Statute Acres.
.... 70,967.				.. 68,209. ..			.. 44,850 ..		21739	....	....	. ....	Population in 1861.
Poor Law Dis.	Public Institutions.			Poor Law Districts.									
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	DISEASES.
16	17	18	19	20	21	22	23	24	25	26	27			28
..	..	..	..	..	..	..	..	..	..	..	..	1	Small-pox	..
..	1	..	..	..	..	..	..	..	..	..	..	1	Chicken-pox	..
1	..	..	..	..	..	1	..	..	..	..	..	4	Measles	..
..	..	2	..	..	1	..	..	..	..	..	..	6	Scarlatina	1
..	..	..	.	..	..	..	..	..	..	..	..	2	Diphtheria	..
2	..	1	..	2	..	..	..	1	..	1	1	16	Whooping-cough	1
..	..	1	..	..	..	..	..	..	..	..	..	1	Croup	..
8	..	7	7	1	3	10	4	15	1	4	3	154	Diarrhœa	8
..	.	4	..	..	..	1	1	2	..	..	2	17	Dysentery	..
..	1	2	..	1	..	..	1	..	1	2	..	26	Continued Fever	3
..	..	..	..	..	..	..	..	..	..	..	..	9	Erysipelas	..
..	..	5	..	..	..	..	..	1	..	1	3	39	Rheumatism	..
..	..	1	..	..	..	..	1	..	1	..	2	8	Neuralgic Affections ..	1
1	1	1	..	..	..	..	1	1	1	1	1	33	Constitutional Syphilis	..
1	..	2	..	2	..	..	..	4	..	1	1	45	Phthisis	8
..	1	..	..	..	1	..	..	..	..	..	2	11	Insanity	..
1	3	15	3	1	..	6	1	4	..	10	4	141	Bronchitis, Influenza, and Catarrah	5
..	..	4	..	..	..	..	..	..	..	1	..	17	Pleurisy & Pneumonia.	1
..	1	5	..	..	..	1	..	1	..	..	3	68	Skin Disease.....	..
1	..	4	2	2	1	..	..	1	1	8	1	61	Dyspepsia	..
11	8	83	3	3	3	4	2	39	8	35	3	638	Accidents and diseases not classified.....	13
26	16	137	15	12	9	23	11	69	13	64	26	1298	TOTAL..... ...	41

is indebted for the annexed Returns.

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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	1	..	1	..	..	..	..	2	4
Whooping-cough	..	..	..	..	1	1	..	..	1	1	..	4	13
Scarlatina	1	3	..	..	..	..	..	..	..	2	..	6	..
Diarrhœa	5	3	2	5	3	4	..	..	1	7	..	30	73
Fever	2	..	..	..	1	3	1	..	3	†2	..	12	13
Diseases of the Lungs	6	5	1	2	..	8	2	..	4	8	3	39	33
Other causes	11	16	11	‡12	14	⁇ 7	9	5	5	11	3	104	106
TOTAL NO. OF DEATHS.	25	27	14	19	20	23	13	5	14	31	6	197	242
TOTAL NO. OF BIRTHS.	31	39	13	22	17	33	16	20	34	62	18	305	302

* Return from Pendleton District commenced June 28.

† One Typhus. ‡ Choleraic collapse, after cramps and vomiting; no Diarrhœa; 24 hours. ⁇ One Inquest.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 31st May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.	DISEASES.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.
2	..	1	3	.... Small-pox	12	19	9	40
18	3	2	23	.... Chicken-pox	12	5	7	24
71	31	25	127	..... Measles	40	42	36	118
17	13	14	44	.... Scarlatina	18	5	12	35
3	8	7	18	.... Diphtheria	4	3	..	7
67	31	26	124	.. Whooping-cough ..	112	56	55	223
2	1	2	5	..... Croup	3	3	6	12
331	355	567	1253	.....Diarrhœa.. ...	152	130	228	510
3	..	4	7	.... Dysentery	35	26	47	108
....	1	2	3	..... Cholera	..	..	..	..
20	20	17	57	.... Erysipelas	24	14	17	55
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
18	23	14	55	..... Insanity	43	37	33	113
561	396	385	1342	Bronchitis and Catarrh	891	530	548	1969
18	11	15	44	..... Pleurisy	58	30	57	145
23	17	23	63	... Pneumonia ..				
5	2	2	9	.... Carbuncle	....	....	..	..
4462	3634	3313	11409	Accidents, and all other Diseases	4323	3133	3404	10860
5622	4546	4419	14587	..... TOTAL	5727	4033	4459	14219

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COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, SEPTEMBER 6, 1862. [No. 110.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Sale, J. CURTIS, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH, ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.		INS.	INS.	INS.	
Mean @ 32° F.	29·721	29·724		—	29·857	29·727	
Highest (Unreduced)	30·078	30·096		—	30·124	30·098	
Lowest (Unreduced)	29·384	29·398		—	29·420	29·332	
Range	0·694	0·698		—	0·704	0·766	
Temperature.							
Adopted Mean	54·5	55·2		54·4	53·9	53·7	
Range for Week	14·0	20·7		21·7	22·1	21·9	
Daily Range	9·0	11·9		15·4	13·6	13·4	
Maximum in Shade	65·0	67·5		67·0	66·6	66·1	
Minimum in Shade	51 0	46·8		45·3	44·5	44·2	
Maximum in Sun	—	84·3		93·0	88·7	83·7	
Maximum in Sun: Black bulb in Vacuo	—	100·0		—	—	—	
Minimum on Grass	—	44·0		43·7	41·2	43·0	
Temperature in Ground at surface	—	53·21		—	—	—	
Temperature 6 inches below	—	53·87		—	—	—	
Temperature 12 inches below	—	55·29		—	—	—	
Temperature of Evaporation	51·9	52·5		51·5	51·1	51·3	
Temperature of Dew Point	49·4	49·9		48·7	48·4	49·0	
Temperature of Air—Dew Point	5·1	5·3		5·7	5·5	4·7	
Hygrometrical condition of the Atmosphere	GRS.	GRS.		GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	4·02	4·03		3·91	3·84	3·92	
Required to Saturate do	0·78	0·89		0·87	0·84	0·72	
Weight of a cubic foot of Air	534·8	534·0		536·0	537·8	535·7	
Degree of Humidity (Saturation—1,000)	0·824	0·830		0·806	0·813	0·839	
	INS.	INS.		INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·88	4·98		4·76	4·70	4·81	
Elastic force of Vapour	0·353	0·360		0·344	0·340	0·348	
Clouds (Covered—10 Clear—0)	—	7·8		—	7·3	8·3	
Prevailing Winds	—	SW, NW.		NW, NE.	NE, SW.	NE.	
Rain	—	3·154		1·320	1·917	2·853	
Days on which it fell	—	6		4	5	5	
Ozonometer.							
Moffat (0—10)	—	0·43		0·21	4·00	1·00	
Schonbein (0—10)	—	0·86		—	—	—	
	INS.	INS.		INS.	INS.	INS.	
Daily Evaporation	0·072	0·076		0·080	0·076	0·065	
Weekly Evaporation	0·504	0·532		0·560	0·532	0·455	

NO RETURN.

There were 4 barometric oscillations during the week, the amount being 1·234 inches. There were 5 temperature oscillations at 8 a.m., the amount being 13·6°.

The mean temperature of the past week was 1·7° below the average of the last thirteen years; and 4·9° below the corresponding week last year.

The mean temperature of the week was the highest at Old Trafford and the lowest at Thelwall.

The degree of humidity was the highest at Eccles, and the least at Bowdon.

Ozone occurred upon 1 day at Old Trafford, Bowdon 4 days, Thelwall 7 days, and Eccles 2 days.

The fall of rain at Old Trafford during the week was enormous, and a comparison with the other stations shows that the fall varied greatly within very narrow limits.

The rain fall during August, at the various Stations, has been as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	2·350	12
Bowdon	2·780	12
Thelwall	2·948	18
Eccles	2·224	16

Old Trafford, Manchester,
September 10, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURNS FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Durin

	MANCHESTER.															
Area in Statute Acres	..... Manchester Township 1,645															
Population in 1861	..... ,, ,, 185,050															
	POOR LAW DISTRICTS.							PUBLIC INSTITUTIONS.								
									ROYAL INFIRMARY.					CHILDREN		
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14	City
Small-pox	..	..	..	1	..	..	1	†3	..	..	..	..	..	..	..	.
Chicken-pox	..	1	..	2	..	..	3	..	..	..	..	..	..	..	..	.
Measles	..	..	..	..	..	4	4	..	..	..	..	..	..	1	..	.
Scarlatina	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	.
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Whooping-cough	..	1	..	..	..	..	1	..	..	..	2	..	..	2	1	.
Croup	..	1	..	..	..	..	1	..	1	..	..	..	..	2	..	.
Diarrhœa	1	9	7	4	4	7	32	8	..	10	..	2	..	30	9	
Dysentery	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	.
Continued Fever	1	..	2	3	..	..	6	1	2	1	..	2	2	2	..	.
Erysipelas	..	..	..	..	..	..	..	2	..	4	..	..	1	..	..	.
Rheumatism	..	3	..	1	2	..	6	4	1	16	2	..	1	3	..	.
Neuralgic Affections	..	..	..	..	..	..	..	..	..	8	..	..	..	1	3	.
Constitutional Syphilis	..	..	1	..	..	..	1	2	..	12	1	..	..	..	..	.
Phthisis	1	..	1	2	1	1	6	2	..	24	1	1	..	2	1	.
Insanity	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	.
Bronchitis, Influenza & Catarrh	1	6	7	3	6	3	26	8	..	45	..	4	..	4	1	
Pleurisy and Pneumonia	1	..	..	1	..	1	3	..	..	..	..	1	..	..	2	.
Skin Diseases	..	..	..	..	1	..	1	9	..	30	..	..	..	8	4	.
Dyspepsia	..	2	..	2	..	..	4	..	1	32	..	..	..	4	2	2
Accidents and diseases not classified	15	18	15	..	19	8	75	40	18	229	7	5	5	33	1	3
TOTAL	20	42	33	19	34	24	172	80	23	411 *	13	17	9	93	24	7

* **Column 28 :** The deaths amongst these patients are not recorded. † Not vaccinated.

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,
(8) ,, M. ROWLAND DAY,
(9), (10), (11), (12) Mr. W. J. MALLETT, ,, W. H HUGHES, ,, C. H. BRADDON,

ANITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

ding Saturday, the 6th day of September 1862.

SALFORD.			HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.				
1,329			477			646		508	2650				Area in Statute Acres.
70,967			68,209			44,850		21739	24,448				Population in 1861.
R W S.	PUBLIC INSTITUTIONS.		POOR LAW DISTRICTS.										
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.
17	18	19	20	21	22	23	24	25	26	27			28
..	..	..	..	..	..	..	1	..	..	..	5	2	Small-pox
1	..	..	..	..	..	..	..	..	..	..	4	..	Chicken-pox
..	..	..	..	..	2	1	1	..	..	..	9	11	Measles
..	..	..	1	..	..	..	..	..	..	..	4	3	Scarlatina
..	..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria
..	1	..	..	..	3	..	2	..	3	2	17	13	Whooping-cough
..	..	..	..	..	1	..	..	..	..	..	5	..	Croup
2	6	3	5	8	8	2	11	1	4	4	150	131	Diarrhœa
.	1	..	..	..	..	..	..	..	..	1	5	8	Dysentery
..	3	..	1	..	..	..	..	..	..	..	20	46	Continued Fever
..	1	..	1	..	..	..	..	..	..	..	9	5	Erysipelas
2	3	1	..	1	1	..	3	..	4	2	50	38	Rheumatism
..	..	..	..	..	..	..	..	..	..	..	12	6	Neuralgic Affections
..	1	..	..	..	..	..	..	..	1	1	19	29	Constitutional Syphilis
..	2	..	..	..	1	..	..	..	..	..	40	34	Phthisis
1	..	..	..	..	..	..	..	..	..	2	4	13	Insanity
5	7	6	2	..	7	1	8	..	10	1	142	146	Bronchitis, Influenza, and Catarrah
..	3	..	1	..	1	..	2	..	1	..	14	7	Pleurisy & Pneumonia.
1	3	..	..	1	..	..	5	..	..	2	65	43	Skin Disease
1	7	..	..	3	1	..	1	..	11	2	71	36	Dyspepsia
4	60	3	4	3	3	3	38	6	30	3	584	620	Accidents and diseases not classified
													DEATHS. 28
17	98	13	15	16	28	7	72	7	64	20	1229	1191	TOTAL 51

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

(18) Mr. J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.

(23) Mr. W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	1	..	1	..	..	2	3
Whooping-cough	..	..	..	2	..	..	..	..	..	1	..	3	6
Scarlatina	1	1	..	..	..	1	..	..	..	2	..	5	1
Diarrhœa	6	4	2	2	2	6	1	1	4	6	1	35	77
Fever	1	2	..	†2	†1	1	..	†1	‡1	..	‖2	11	11
Diseases of the Lungs	4	1	2	6	..	4	..	..	3	9	2	31	26
Other causes	9	13	14	5	11	⁑8	7	7	9	11	5	99	105
TOTAL NO. OF DEATHS.	21	21	18	17	14	20	9	9	18	29	10	186	229
TOTAL NO. OF BIRTHS.	30	46	17	17	18	26	13	23	23	48	11	272	303

* Return from Pendleton District commenced June 28.

† Typhus. ‡ Gastric. ‖ One Typhus. ⁑ 2 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 31st May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.	DISEASES.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.
2	..	1	3	.... Small-pox	12	19	9	40
18	3	2	23	.... Chicken-pox	12	5	7	24
71	31	25	127	..... Measles	40	42	36	118
17	13	14	44	.... Scarlatina	18	5	12	35
3	8	7	18	.... Diphtheria	4	3	..	7
67	31	26	124	.. Whooping-cough ..	112	56	55	223
2	1	2	5	..... Croup	3	3	6	12
331	355	567	1253	.....Diarrhœa.. ...	152	130	228	510
3	..	4	7	.... Dysentery	35	26	47	108
....	1	2	3	..... Cholera	..	..	..	..
20	20	17	57	.... Erysipelas	24	14	17	55
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
18	23	14	55	..... Insanity	43	37	33	113
561	396	385	1342	Bronchitis and Catarrh	891	530	548	1969
18	11	15	44	..... Pleurisy	58	30	57	145
23	17	23	63	.. Pneumonia ..				
5	2	2	9	.... Carbuncle	....	....	..	..
4462	3634	3313	11409	Accidents, and all other Diseases	4323	3133	3404	10860
5622	4546	4419	14587	..... TOTAL	5727	4033	4459	14219

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, SEPTEMBER 13, 1862. [No. 111.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKRETH, ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·889	29·878	—	29·911	29·874	
Highest (Unreduced)	30·160	30·074	—	30·110	30·057	
Lowest (Unreduced)	29·774	29·627	—	29·662	29·612	
Range	0·386	0·447	—	0·448	0·445	
Temperature.						
Adopted Mean	55·1	55·5	56·0	55·9	55·6	
Range for Week	18·0	25·5	24·4	25·7	27·9	
Daily Range	11·3	16·2	10·9	15·9	16·9	
Maximum in Shade	66·0	68·5	66·2	68·0	67·7	
Minimum in Shade	48·0	43·0	41·8	42·3	39·8	
Maximum in Sun	—	80·3	83·8	87·0	84·2	
Maximum in Sun: Black bulb in Vacuo	—	96·5	—	—	—	
Minimum on Grass	—	38·0	42·0	40·2	36·6	
Temperature in Ground at surface	—	52·97	—	—	—	
Temperature 6 inches below	—	53·50	—	—	—	
Temperature 12 inches below	—	54·82	—	—	—	
Temperature of Evaporation	52·7	53·4	54·0	53·0	51·9	
Temperature of Dew Point	50·4	51·4	52·1	50·3	48·4	
Temperature of Air—Dew Point	4·7	4·1	3·9	5·6	7·2	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	4·10	4·27	4·40	4·11	3·82	
Required to Saturate do	0·81	0·68	0·60	0·88	1·14	
Weight of a cubic foot of Air	537·1	536·3	535·6	536·5	536·4	
Degree of Humidity (Saturation—1,000)	0·847	0·863	0·870	0·915	0·774	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	5·06	5·24	5·38	5·05	4·70	
Elastic force of Vapour	0·366	0·379	0·389	0·365	0·340	
Clouds (Covered—10 Clear—0)	—	6·3	—	6·6	7·7	
Prevailing Winds	—	S.	SW, S, NW.	SW, S, NW.	SW, S, NW.	
Rain	—	1·321	0·360	0·562	1·168	
Days on which it fell	—	6	2	6	6	
Ozonometer.						
Moffat (0—10)	—	0·57	0·94	3·10	0·71	
Schonbein (0—10)	—	0·71	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·068	0·062	0·060	0·082	0·103	
Weekly Evaporation	0·476	0·434	0·420	0·574	0·721	

There were 5 barometric oscillations during the week, the amount being 0·755 inches. There were 3 temperature oscillations the amount being 26·4°.

The mean temperature of the past week was 0·5° below the average of the last thirteen years; and 0·1° above the corresponding week last year.

The mean temperature of the week was the highest at Bowdon and the lowest at the Royal Infirmary.

The degree of humidity was the highest at Thelwall and the least at Eccles.

Ozone occurred upon 1 day at Old Trafford, and 2 days each at Eccles and Bowdon: at Thelwall Ozone was found upon 5 days, there being no observations upon the remaining 2 days.

Old Trafford, Manchester,
September 17, 1862.

G. V. VERNON, F.R.A.S.

ERRATUM.—In last week's report it was stated, that, the mean temperature of the week was the lowest at Thelwall, in place of "Thelwall" read "Eccles."

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC I

New Cases of Disease coming under Treatment Durin

	MANCHESTER.															
Area in Statute Acres	Manchester Township 1,645															
Population in 1861	„ „ 185,050															
DISEASES.	Poor Law Districts.							Public Institutions.								
									Royal Infirmary.					Children		
	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14	1
Small-pox	..	..	..	2	..	..	2	1	..	..	..	..	..	..	..	
Chicken-pox	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	
Scarlatina	..	..	..	2	..	2	4	..	..	..	..	6	..	1	..	
Diphtheria	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	
Whooping-cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diarrhœa	2	3	1	2	4	4	16	..	..	15	1	..	..	40	9	
Dysentery	..	..	..	..	..	..	..	..	..	3	..	..	..	..	1	
Continued Fever	2	3	4	5	2	..	16	7	6	..	1	2	2	11	1	
Erysipelas	..	..	..	1	1	1	3	..	..	2	..	..	1	..	..	
Rheumatism	3	1	1	2	2	..	9	2	..	23	1	1	..	..	..	
Neuralgic Affections	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Constitutional Syphilis	..	..	..	..	..	..	..	11	..	12	..	..	..	1	..	
Phthisis	1	..	1	1	..	1	4	2	..	13	3	2	..	1	..	
Insanity	..	..	..	..	..	1	1	2	..	..	..	..	..	..	..	
Bronchitis, Influenza & Catarrh	2	11	6	4	11	9	43	11	..	53	..	4	..	15	3	
Pleurisy and Pneumonia	..	..	1	..	..	..	1	1	1	5	1	..	..	..	..	
Skin Diseases	..	..	..	1	2	..	3	9	..	14	..	..	..	5	2	
Dyspepsia	1	..	..	3	2	..	6	..	..	23	1	2	..	5	2	
Accidents and diseases not classified	13	14	13	8	20	13	81	37	27	272	7	7	8	35	3	
TOTAL	24	32	27	31	44	31	189	83	34	438 *	15	24	11	116	22	1

* **Column 28 :** The deaths amongst these patients are not recorded.

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) „ T. W. DYSON,
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NITARY ASSOCIATION.

S OF MANCHESTER AND ADJOINING DISTRICTS.

ding Saturday, the 13th day of September 1862.

SALFORD.			HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.				
.. 1,329			.... 477.			.. 646. ..		508.	..... .2650.....				Area in Statute Acres.
.. 70,967.			.. 68,209. ..			.. 44,850 ..		21739	.....24,448.....				Population in 1861.
OR W S.	PUBLIC INSTITUTIONS.		POOR LAW DISTRICTS.										
	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
	17	18	19	20	21	22	23	24	25	26	27				28
	..	..	..	..	..	..	..	..	..	..	..	3	1	Small-pox	1
	..	..	..	..	..	..	2	..	..	..	..	4	..	Chicken-pox	..
	..	..	..	1	1	..	..	..	..	..	..	4	9	Measles	1
	..	..	..	..	..	..	..	..	..	..	..	11	2	Scarlatina	..
	..	..	..	..	..	..	..	..	..	..	..	1	..	Diphtheria	..
	..	..	..	..	..	4	..	1	..	2	1	9	15	Whooping-cough	1
	..	..	..	..	..	..	..	..	..	..	..	..	..	Croup	..
	1	4	6	..	5	1	4	6	2	5	3	127	119	Diarrhœa	8
	.	1	..	..	..	..	..	..	..	..	1	7	5	Dysentery	..
	..	..	..	..	..	1	..	..	..	..	1	50	53	Continued Fever	3
	..	..	..	..	..	..	..	..	..	..	..	7	8	Erysipelas	..
	..	1	1	3	..	1	2	2	2	4	1	54	45	Rheumatism	..
	..	1	..	..	..	..	..	..	..	..	..	2	3	Neuralgic Affections ..	..
	..	2	..	..	..	..	..	1	..	1	1	29	18	Constitutional Syphilis	..
	1	5	..	..	..	..	1	1	..	4	2	39	58	Phthisis	3
	2	..	..	..	..	..	..	..	1	..	2	8	8	Insanity	..
	1	7	3	2	1	5	1	10	4	7	..	179	116	Bronchitis, Influenza, and Catarrah	2
	..	1	..	..	..	1	..	1	..	2	..	14	6	Pleurisy & Pneumonia.	..
	2	1	..	..	..	..	9	2	..	..	2	50	38	Skin Disease.....	..
	..	6	1	..	3	2	..	2	2	8	2	69	54	Dyspepsia	..
	5	77	3	4	5	6	6	29	3	28	4	657	625	Accidents and diseases not classified.....	36
	12	106	14	10	15	21	25	55	14	61	20	1324	1183	TOTAL..... ...	55

is indebted for the annexed Returns.

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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	1	..	1	..	..	..	..	..	..	2	..
Measles	1	..	1	..	..	..	1	..	1	..	1	5	1
Whooping-cough	..	..	..	..	..	1	3	..	1	1	..	6	4
Scarlatina	..	..	..	..	..	..	..	..	..	1	..	1	..
Diarrhœa	5	8	3	2	5	2	4	1	6	2	3	41	86
Fever	1	..	1	..	..	..	1	..	..	‡2	..	5	10
Diseases of the Lungs	3	6	..	3	..	5	2	..	3	5	5	32	28
Other causes	13	18	23	7	8	†5	7	†6	4	29	3	123	142
TOTAL NO. OF DEATHS.	23	32	29	12	14	13	18	7	15	40	12	215	271
TOTAL NO. OF BIRTHS.	34	48	13	15	24	26	22	15	27	52	22	298	275

* Return from Pendleton District commenced June 28.
† 1 Inquest. ‡ One Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 31st May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.	DISEASES.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.
2	..	1	3	.... Small-pox	12	19	9	40
18	3	2	23	.... Chicken-pox	12	5	7	24
71	31	25	127	..... Measles	40	42	36	118
17	13	14	44	.... Scarlatina	18	5	12	35
3	8	7	18	.... Diphtheria	4	3	..	7
67	31	26	124	.. Whooping-cough ..	112	56	55	223
2	1	2	5	..... Croup	3	3	6	12
331	355	567	1253	.....Diarrhœa.. ...	152	130	228	510
3	..	4	7	.... Dysentery	35	26	47	108
....	1	2	3	..... Cholera	..	..	..	..
20	20	17	57	.... Erysipelas	24	14	17	55
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
18	23	14	55	..... Insanity	43	37	33	113
561	396	385	1342	Bronchitis and Catarrh	891	530	548	1969
18	11	15	44	..... Pleurisy	58	30	57	145
23	17	23	63	... Pneumonia ..				
5	2	2	9	.... Carbuncle	....	....	..	..
4462	3634	3313	11409	Accidents, and all other Diseases	4323	3133	3404	10860
5622	4546	4419	14587	..... TOTAL	5727	4033	4459	14219

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

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33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

Vol. II.] WEEK ENDING SATURDAY, SEPTEMBER 20, 1862. [No. 112.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq.	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	30·133	30·169	—	30·191	30·168	
Highest (Unreduced)	30·416	30·426	—	30·452	30·480	
Lowest (Unreduced)	29·708	29·717	—	29·748	29·712	
Range	0·708	0·709	—	0·704	0·696	
Temperature.						
Adopted Mean	53·6	52·0	53·4	52·3	52·6	
Range for Week	21·0	32·0	30·5	31·4	28·2	
Daily Range	14·0	19·5	12·5	20·2	17·7	
Maximum in Shade	67·0	71·0	68·5	67·2	64·8	
Minimum in Shade	46·0	39·0	38·0	35·8	36·6	
Maximum in Sun	—	84·2	92·2	92·2	89·9	
Maximum in Sun: Black bulb in Vacuo	—	102·0	—	—	—	
Minimum on Grass	—	35·2	37·6	35·8	34·1	
Temperature in Ground at surface	—	50·36	—	—	—	
Temperature 6 inches below	—	51·35	—	—	—	
Temperature 12 inches below	—	53·24	—	—	—	
Temperature of Evaporation	50·8	49·6	51·9	49·9	49·7	
Temperature of Dew Point	48·1	47·1	50·4	47·5	46·8	
Temperature of Air—Dew Point	5·5	4·9	3·0	4·8	5·8	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·78	3·68	3·83	3·74	3·65	
Required to Saturate do	0·84	0·72	0·45	0·72	0·87	
Weight of a cubic foot of Air	543·2	544·4	542·8	544·7	5 5·0	
Degree of Humidity (Saturation—1,000)	0·812	0·836	0·899	0·834	0·812	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·65	4·48	5·06	4·55	4·44	
Elastic force of Vapour	0·336	0·324	0·366	0·329	0·321	
Clouds (Covered—10 Clear—0)	—	7·5	—	4·9	7·6	
Prevailing Winds	—	NE, NW.	NE, E.	SE, ENE.	NE.	
Rain	—	0·102	0·600	0·455	0·065	
Days on which it fell	—	1	2	1	1	
Ozonometer.						
Moffat (0—10)	—	0·28	0·28	3·07	0·85	
Schonbein (0—10)	—	0·14	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·076	0·064	0·043	0·064	0·076	
Weekly Evaporation	0·532	0·448	0·301	0·448	0·532	

There were 2 barometric oscillations during the week, the amount being 0·975 inches. There were 6 temperature oscillations the amount being 51·8°.

The mean temperature of the past week was 2·4° below the average of the last thirteen years; and 0·9° below the corresponding week last year. The 16th, 18th, and 19th, were marked by a very sudden decline of temperature as compared with the preceding and following days.

The mean temperature of the week was the highest at the Royal Infirmary and the lowest at Old Trafford.

The degree of humidity was the highest at Bowdon and the least at the Royal Infirmary and Eccles.

Ozone occurred upon 1 day at Old Trafford, 2 days at Bowdon, 7 days at Thelwall, and 3 days at Eccles.

The mean barometer reading this week has been higher than that of any week since the week ending Dec. 21, 1861.

Old Trafford, Manchester,
September 23, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment During

	MANCHESTER.															
Area in Statute Acres	..... Manchester Township 1,645															
Population in 1861	..... „ „ 185,050															
	Poor Law Districts.							Public Institutions.								
									Royal Infirmary.					Children		
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14	
Small-pox	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Measles	..	..	..	..	..	3	3	..	..	..	..	..	..	..	..	
Scarlatina	..	..	..	1	..	..	1	..	..	..	..	4	..	..	..	
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Whooping-cough	..	2	..	..	..	..	2	..	..	..	..	..	..	2	..	
Croup	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	
Diarrhœa.....	..	8	3	1	3	4	19	2	..	10	..	1	..	20	8	
Dysentery	..	..	..	3	..	..	3	..	..	3	2	..	..	2	..	
Continued Fever.....	1	5	1	6	..	3	16	8	4	1	1	..	..	5	1	
Erysipelas	..	..	..	..	..	..	..	..	..	4	1	..	1	..	..	
Rheumatism	1	11	..	1	..	1	14	8	..	15	..	1	2	..	..	
Neuralgic Affections	..	..	..	..	..	..	..	..	..	6	..	..	..	..	2	
Constitutional Syphilis	..	..	..	..	..	1	1	2	..	15	..	..	..	2	1	
Phthisis	1	1	1	..	..	1	4	3	..	20	..	1	..	1	..	
Insanity	..	..	..	..	..	1	1	3	..	..	..	..	1	..	..	
Bronchitis, Influenza & Catarrh	6	18	9	4	13	5	55	9	4	32	1	2	2	12	2	
Pleurisy and Pneumonia....	..	..	..	..	..	..	...	1	1	1	..	..	..	1	2	
Skin Diseases.....	..	..	2	2	..	..	4	5	..	26	..	..	..	3	6	
Dyspepsia	..	12	..	..	1	..	13	4	..	13	4	..	..	2	1	
Accidents and diseases not classified.....	18	22	5	11	12	10	78	22	33	256	12	9	8	48	4	
TOTAL	27	79	21	29	29	30	215	67	43	402 *	18	18	14	98	27	

* **Column 28 :** The deaths amongst these patients are not recorded.

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) „ T. W. DYSON,
(3) „ JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) „ EVAN THOMAS,
(7) „ J. BROADBENT,
(8) „ M. ROWLAND DAY,

(9) (10) Mr. W. J. MALLETT,
(11) „ W. H HUGHES,
(12) „ C. H. BRADDON,

ANITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

ding Saturday, the 20th day of September 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.				
.. 1,329				.... 477.			.. 646. ..		508.	..... .2650.....				Area in Statute Acres.
.. 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448				Population in 1861.
OOR AW DIS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.										
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.
6	17	18	19	20	21	22	23	24	25	26	27			28
.	..	1	..	..	..	..	..	1	..	..	..	3	1	Small-pox .....
..	..	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox .....
.	..	..	..	..	..	1	..	4	..	..	..	8	10	Measles .....
.	..	..	..	1	..	..	..	..	..	..	..	6	2	Scarlatina .....
.	..	..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria .....
.	..	..	..	..	..	1	1	..	..	1	..	7	19	Whooping-cough ....
.	..	..	..	..	..	..	..	..	..	..	..	1	..	Croup .....
6	..	5	6	1	3	5	4	7	..	4	2	105	94	Diarrhœa .....
1	.	..	..	..	..	..	..	..	1	1	1	14	15	Dysentery .....
1	..	2	..	1	..	..	1	..	1	..	1	43	41	Continued Fever ....
.	..	..	..	1	..	..	..	1	..	..	..	8	7	Erysipelas .....
2	1	3	2	..	..	..	2	2	1	4	2	60	48	Rheumatism .....
.	..	1	..	..	..	..	1	..	..	..	..	10	9	Neuralgic Affections ..
.	..	5	..	..	..	..	..	..	..	2	1	29	14	Constitutional Syphilis
1	..	6	..	2	1	..	..	..	..	4	..	43	41	Phthisis .....
.	1	..	..	..	..	..	..	..	..	..	2	8	7	Insanity .....
5	2	15	6	2	4	8	1	4	1	8	..	175	162	Bronchitis, Influenza, and Catarrah ....
.	..	2	..	..	..	..	..	6	..	2	..	16	8	Pleurisy & Pneumonia.
1	1	†4	..	..	..	3	..	..	..	..	4	57	37	Skin Disease.....
4	..	4	1	..	..	1	..	3	2	7	3	60	44	Dyspepsia .....
6	4	47	3	2	6	3	6	40	5	26	4	627	641	Accidents and diseases not classified.....
7	9	95	18	10	14	22	16	68	11	59	20	1280	1200	TOTAL.....

DEATHS.

Small-pox	..
Chicken-pox	..
Measles	..
Scarlatina	1
Diphtheria	..
Whooping-cough	..
Croup	..
Diarrhœa	10
Dysentery	..
Continued Fever	4
Erysipelas	..
Rheumatism	..
Neuralgic Affections ..	..
Constitutional Syphilis	..
Phthisis	7
Insanity	..
Bronchitis, Influenza, and Catarrah	9
Pleurisy & Pneumonia.	2
Skin Disease.....	..
Dyspepsia	..
Accidents and diseases not classified.....	26
TOTAL.....	59

† 3 Itch.

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

(18) Mr. J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.

(23) Mr. W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	2	..	2	1
Whooping-cough	..	..	1	1	..	1	..	..	2	..	..	5	7
Scarlatina	3	2	..	..	..	..	1	..	..	..	..	6	2
Diarrhœa	2	8	2	5	3	4	3	1	5	5	..	38	45
Fever	5	1	4	1	..	1	‡2	..	..	..	‡2	16	9
Diseases of the Lungs	8	3	..	5	..	8	3	..	2	7	2	38	39
Other causes	13	10	14	8	14	†7	⁑15	8	5	13	7	114	124
TOTAL NO. OF DEATHS.	31	24	21	20	17	21	24	9	14	27	11	219	227
TOTAL NO. OF BIRTHS.	33	41	18	16	17	30	24	21	34	52	9	295	288

* Return from Pendleton District commenced June 28.

† One Inquest. ‡ One Gastric. ⁑ One Cholera Morbus—5 days.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson. Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD. Population in 1861, 390,815.

5 weeks ending 31st May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.	DISEASES.	5 Weeks ending 31st. May.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	TOTAL.
2	..	1	3	.... Small-pox	12	19	9	40
18	3	2	23	.... Chicken-pox	12	5	7	24
71	31	25	127	..... Measles	40	42	36	118
17	13	14	44	.... Scarlatina	18	5	12	35
3	8	7	18	.... Diphtheria	4	3	..	7
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331	355	567	1253	.....Diarrhœa.. ...	152	130	228	510
3	..	4	7	.... Dysentery	35	26	47	108
....	1	2	3	..... Cholera	..	..	..	..
20	20	17	57	.... Erysipelas	24	14	17	55
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
18	23	14	55	..... Insanity	43	37	33	113
561	396	385	1342	Bronchitis and Catarrh	891	530	548	1969
18	11	15	44	..... Pleurisy	58	30	57	145
23	17	23	63	... Pneumonia ..				
5	2	2	9	.... Carbuncle	....	....	..	..
4462	3634	3313	11409	Accidents, and all other Diseases	4323	3133	3404	10860
5622	4546	4419	14587	..... TOTAL	5727	4033	4459	14219

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COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, SEPTEMBER 27, 1862. [No. 113.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F	29·908	29·933	—	29·916	29·905	
Highest (Unreduced)	30·272	30·284	—	30·304	30·274	
Lowest (Unreduced)	29·768	29·763	—	29·742	29·734	
Range	0·504	0·521	—	0·562	0·540	
Temperature.						
Adopted Mean	55·0	55·5	55·0	54·7	54·2	
Range for Week	18·0	23·5	22·1	27·7	22·9	
Daily Range	10·7	14·1	14·4	16·9	14·7	
Maximum in Shade	65·0	68·5	65·5	68·0	66·4	
Minimum in Shade	47·0	45·0	43·4	40·3	43·5	
Maximum in Sun	—	81·9	89·6	89·5	84·5	
Maximum in Sun: Black bulb in Vacuo	—	89·5	—	—	—	
Minimum on Grass	—	39·0	40·2	37·0	39·2	
Temperature in Ground at surface	—	51·68	—	—	—	
Temperature 6 inches below	—	52·12	—	—	—	
Temperature 12 inches below	—	53·23	—	—	—	
Temperature of Evaporation	52·3	52·3	52·5	51·9	50·6	
Temperature of Dew Point	49·7	49·3	50·1	49·2	47·1	
Temperature of Air—Dew Point	5·3	6·2	4·9	5·5	7·1	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·99	3·94	4·05	4·00	3·66	
Required to Saturate do	0·91	1·01	0·85	0·84	1·08	
Weight of a cubic foot of Air	537·5	537·5	537·9	538·1	538·6	
Degree of Humidity (Saturation—1,000)	0·828	0·803	0·840	0·812	0·766	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·94	4·87	5·01	4·85	4·48	
Elastic force of Vapour	0·357	0·352	0·362	0·351	0·324	
Clouds (Covered—10 Clear—0)	—	7·2	—	7·0	7·9	
Prevailing Winds	—	NE.	NE, E.	E, SE.	E, NE, SE.	
Rain	—	0·401	0·220	0·432	0·344	
Days on which it fell	—	4	2	4	4	
Ozonometer.						
Moffat (0—10)	—	0·00	0·78	4·00	0·57	
Schonbein (0—10)	—	0·00	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·076	0·089	0·071	0·077	0·097	
Weekly Evaporation	0·532	0·623	0·497	0·539	0·679	

There were 6 barometric oscillations during the week, the amount being 0·722 inches. There were 4 temperature oscillations the amount being 18·2°.

The mean temperature of the past week was 2·1° below the average of the last thirteen years; and 3·4° above the corresponding week last year.

The mean temperature of the week was the highest at Old Trafford, and the lowest at Eccles.

The degree of humidity was the highest at Bowdon and the least at Eccles.

Ozone was not found during the week at Old Trafford, at Bowdon it was found on 3 days, Thelwall 6 days, and Eccles 2 days.

Old Trafford, Manchester,
September 30, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Durin

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	1	1	..	..	2	..	4	..	1	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	3	3	..	..	..	..	..	..	1	..
Scarlatina	1	..	..	2	..	1	4	..	..	..	..	1	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	5	..	..	..	..	5	..	..	..	..	..	..	3	..
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa.....	..	4	8	4	4	3	23	3	..	9	3	3	..	16	4
Dysentery	..	..	..	1	..	..	1	..	..	..	2	..	..	1	..
Continued Fever.....	2	4	8	1	..	3	18	3	4	1	..	2	..	14	..
Erysipelas	..	..	..	1	..	..	1	2	..	2	..	..	..	..	..
Rheumatism	1	12	3	4	2	1	23	1	1	17	..	1	2	..	..
Neuralgic Affections.....	..	..	..	..	..	..	..	..	..	5	2	..	..	..	1
Constitutional Syphilis	..	..	..	..	..	..	..	1	..	23	..	1	..	3	2
Phthisis	..	..	1	..	..	2	3	4	..	18	3	1	..	5	2
Insanity	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	3	15	9	6	8	6	47	15	..	39	3	5	1	8	2
Pleurisy and Pneumonia....	3	..	1	..	..	..	4	3	..	..	..	..	3	..	1
Skin Diseases.....	..	..	6	..	..	4	10	7	..	38	1	..	..	14	1
Dyspepsia	3	..	2	2	..	1	8	2	1	34	1	1	..	1	1
Accidents and diseases not classified.....	14	28	17	5	18	10	92	40	33	233	18	11	5	64	8
TOTAL	28	69	55	26	34	34	246	81	40	419	33	26	11	130	22

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,
(8) ,, M. ROWLAND DAY,

(9) (10) Mr. W. J. MALLETT,
(11) ,, W. H HUGHES,
(12) ,, C. H. BRADDON,

ANITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

nding Saturday, the 27th day of September, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.					
... 1,329				.... 477.			.. 646. ..		508.	..... .2650.....				Area in Statute Acres.	
... 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448				Population in 1861.	
POOR LAW DIS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.										DISEASES.	DEATHS.
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.		
16	17	18	19	20	21	22	23	24	25	26	27				28
..	..	..	..	..	..	..	..	1	..	2	..	8	..	Small-pox	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox	..
..	..	..	..	..	1	..	..	3	..	..	..	8	25	Measles	..
..	..	..	..	..	..	..	..	..	..	..	..	5	3	Scarlatina	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria	..
1	..	3	..	1	..	2	1	1	..	..	..	17	18	Whooping-cough	..
..	..	1	..	..	..	1	1	..	..	..	..	3	..	Croup	..
3	..	1	4	..	2	4	..	1	..	3	1	82	70	Diarrhœa	8
..	.	4	..	..	..	..	..	..	..	2	..	10	4	Dysentery	..
1	..	1	..	1	..	..	1	..	2	1	1	50	58	Continued Fever	3
..	..	1	..	..	..	..	..	1	..	..	..	7	3	Erysipelas	..
..	..	5	2	..	..	1	1	5	2	3	..	65	37	Rheumatism	1
..	..	2	..	..	..	..	1	..	..	..	..	11	14	Neuralgic Affections ..	..
..	2	2	..	..	..	..	..	..	..	2	1	37	21	Constitutional Syphilis	..
1	..	4	..	..	..	1	..	..	..	4	1	47	33	Phthisis	5
..	1	..	..	..	..	..	..	..	..	..	1	2	6	Insanity	1
5	3	16	7	3	2	7	4	8	5	9	..	189	192	Bronchitis, Influenza, and Catarrah	3
..	..	3	..	..	1	..	..	2	..	1	..	18	14	Pleurisy & Pneumonia.	..
1	4	5	..	..	1	..	1	2	..	..	3	88	41	Skin Disease.....	..
2	1	11	..	..	3	..	..	6	..	6	4	82	45	Dyspepsia	..
3	4	70	3	1	6	5	3	31	3	28	8	674	548	Accidents and diseases not classified.....	27
7	15	129	16	6	16	21	13	61	12	61	20	1403	1132	TOTAL.....	48

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

(18) Mr. J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.

(23) Mr. W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON
(27) ,, J.V.L. WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	.
Measles	..	1	..	..	1	1	1	..	3	..	1	8	2
Whooping-cough	1	..	..	..	..	1	2	..	1	1	..	6	11
Searlatina	..	1	1	..	..	..	..	..	..	2	..	4	1
Diarrhœa	2	2	2	6	4	4	5	..	4	6	1	36	40
Fever	1	..	..	..	..	2	†1	..	†1	2	1	8	16
Diseases of the Lungs	..	3	18	1	..	6	..	..	..	9	2	39	44
Other causes	10	12	..	10	22	3	6	‡4	9	16	4	96	145
TOTAL NO. OF DEATHS.	14	19	21	17	27	17	15	4	18	36	9	197	259
TOTAL NO. OF BIRTHS.	42	34	18	33	20	25	49	24	27	70	25	367	316

* Return from Pendleton District commenced June 28.
† Gastric. ‡ 2 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson, Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD. Population in 1861, 390,815.

4 Weeks ending 28th June.	4 Weeks ending 26th July.	5 weeks ending 30th August.	TOTAL.	DISEASES.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	5 Weeks ending 30th August.	TOTAL.
..	1	1	2	.... Small-pox	19	9	13	41
3	2	2	7	.... Chicken-pox	5	7	18	30
31	25	43	99	..... Measles	42	36	32	110
13	14	32	59	.... Scarlatina	5	12	20	37
8	7	3	18	.... Diphtheria	3	..	7	10
31	26	55	112	.. Whooping-cough ..	56	55	59	170
1	2	1	4	..... Croup	3	6	6	15
355	567	1538	2460	.....Diarrhœa.....	130	228	562	920
..	4	1	5	.... Dysentery	26	47	58	131
1	2	1	4	..... Cholera	..	..	..	..
20	17	24	61	.... Erysipelas	14	17	28	59
..	..	1	1	.. Puerperal Fever ..	..	..	..	..
23	14	14	51	..... Insanity	37	33	34	104
396	385	467	1248	Bronchitis and Catarrh	530	548	742	1820
11	15	6	32	..... Pleurisy	30	57	51	138
17	23	17	57	.... Pneumonia ..				
2	2	5	9	.... Carbuncle	....	..	....	..
3634	3313	4215	11162	Accidents, and all other Diseases	3133	3404	4262	10799
4546	4419	6426	15391	..... TOTAL	4033	4459	5892	14384

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, OCTOBER 4, 1862. [No. 114.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

MANCHESTER 4 OCT 1862

	Royal Infirmary, M. R. DAY, Esq.	Old Trafford, G. V. VERNON, Esq.		Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, Esq.	Eccles, T. MACKERETH Esq.	Ollerenshaw, A. NEILD, Esq.
Barometer.	INS.	INS.		INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·862	29·873		—	29·904	29·884	
Highest (Unreduced)	30·354	30·447		—	30·472	30·440	
Lowest (Unreduced)	29·622	29·598		—	29·668	29·612	
Range	0·732	0·849		—	0·804	0·828	
Temperature.							
Adopted Mean	57·8	57·1		57·7	56·9	57·1	
Range for Week	20·5	25·2		26·0	26·0	25·6	
Daily Range	10·4	15·6		13·7	16·4	13·1	
Maximum in Shade	67·0	68·5		68·0	67·0	67·4	
Minimum in Shade	46·5	43·3		42·0	41·0	41·8	
Maximum in Sun	—	80·5		77·1	84·2	88·7	
Maximum in Sun: Black bulb in Vacuo	—	92·0		—	—	—	
Minimum on Grass	—	39·0		39·0	40·0	40·2	
Temperature in Ground at surface	—	54·46		—	—	—	
Temperature 6 inches below	—	54·61		—	—	—	
Temperature 12 inches below	—	55·20		—	—	—	
Temperature of Evaporation	55·1	54·7		55·2	54·4	54·6	
Temperature of Dew Point	52·7	52·5		53·0	52·4	52·3	
Temperature of Air—Dew Point	5·1	4·6		4·7	4·5	4·8	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.		GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	4·45	4·40		4·37	4·34	4·37	
Required to Saturate do	0·91	0·82		0·85	0·84	0·85	
Weight of a cubic foot of Air	533·6	534·5		533·7	535·2	534·7	
Degree of Humidity (Saturation—1,000)	0·828	0·847		0·840	0·840	0·841	
	INS.	INS.		INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	5·41	5·48		5·57	5·40	5·39	
Elastic force of Vapour	0·391	0·396		0·403	0·394	0·393	
Clouds (Covered—10 Clear—0)	—	6·8		—	7·1	8·8	
Prevailing Winds	—	SE,S.		SW,S.	SW,S.	SW,S.	
Rain	—	0·114		0·430	0·245	0·236	
Days on which it fell	—	4		5	5	5	
Ozonometer.							
Moffat (0—10)	—	1·86		0·86	5·79	0·03	
Schonbein (0—10)	—	1·57		—	—	—	
	INS.	INS.		INS.	INS.	INS.	
Daily Evaporation	0·088	0·071		0·074	0·070	0·074	
Weekly Evaporation	0·616	0·497		0·518	0·490	0·518	

There were 5 barometric oscillations during the week, the amount being 1·165 inches. There were 5 temperature oscillations at 8 a.m., the amount being 45·0°; this is a very large amount, representing an average daily variation of temperature at 8 a.m. of 6·43°, or the variation equals the mean difference of temperature between September and October.

The mean temperature of the week was 3·8° above the mean of the last thirteen years; and 1·5° above the corresponding week last year.

Ozone occurred upon 2 days at Old Trafford, Bowdon 3 days, Thelwall 7 days, and Eccles 1 day.

The fall of rain during September has been as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	4·998	19
Bowdon	2·800	13
Thelwall	3·398	18
Eccles	4·545	17

The fall at Bowdon appears unusually small, as compared with the other stations; the smaller fall at Thelwall is no doubt owing to its nearer proximity to the sea, the fall of rain at Liverpool being much less than that at Manchester.

Old Trafford, Manchester,
October 8, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC I

New Cases of Disease coming under Treatment Durin

MANCHESTER.

Area in Statute Acres ..... Manchester Township 1,645 .....
Population in 1861 ..... „ „ 185,050 .....

DISEASES.	Poor Law Districts.							Public Institutions.								
									Royal Infirmary.					Children		
	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14	
Small-pox	..	..	..	2	1	..	3	..	..	..	..	..	..	..	..	
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Scarlatina	..	..	..	..	2	2	4	..	..	..	..	..	1	..	..	
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	
Whooping-cough	..	1	..	..	..	2	3	..	..	..	2	..	..	1	..	
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diarrhœa	1	2	2	3	8	4	20	4	..	8	2	..	1	20	6	
Dysentery	1	..	..	1	..	..	2	..	..	..	..	1	..	1	2	
Continued Fever	2	8	7	10	1	..	28	5	1	..	..	..	2	16	2	
Erysipelas	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	
Rheumatism	4	1	4	6	11	..	26	7	2	17	..	1	..	..	..	
Neuralgic Affections	1	..	..	..	..	..	1	..	..	9	..	..	1	1	..	
Constitutional Syphilis	..	..	1	..	..	..	1	2	..	27	..	1	1	1	..	
Phthisis	..	..	2	..	1	1	4	3	1	19	5	2	..	3	1	
Insanity	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	
Bronchitis, Influenza & Catarrh	7	7	14	10	24	12	74	8	..	36	9	2	1	8	2	
Pleurisy and Pneumonia	1	..	1	..	1	..	3	..	..	..	..	1	2	2	3	
Skin Diseases	6	2	3	1	..	..	12	15	..	26	..	..	..	10	..	
Dyspepsia	2	..	4	..	1	..	7	2	..	27	..	..	..	1	1	
Accidents and diseases not classified	27	12	13	6	42	17	117	38	32	239	29	5	14	57	5	
TOTAL	52	33	51	39	92	38	305	85	36	412	47	14	23	122	22	

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) „ T. W. DYSON,
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(5) Mr. C. S. BOMPAS,
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NITARY ASSOCIATION.

S OF MANCHESTER AND ADJOINING DISTRICTS.

ding Saturday, the 4th day of October, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.				
.. 1,329				.... 477.			.. 646. ..		508.	..... .2650.....				Area in Statute Acres.
.. 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448				Population in 1861.
OR W IS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.										
	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.
6	17	18	19	20	21	22	23	24	25	26	27			28
.	..	..	..	..	..	..	..	1	..	..	..	4	..	Small-pox .....
.	..	..	..	..	..	..	..	..	..	..	..	1	2	Chicken-pox .....
.	..	..	..	..	2	..	..	3	..	..	..	5	26	Measles .....
.	..	..	..	1	..	..	..	..	..	..	..	6	10	Scarlatina .....
.	..	..	..	..	..	..	..	..	..	..	..	1	1	Diphtheria .....
.	..	..	..	..	..	..	..	1	..	..	..	7	26	Whooping-cough ....
.	..	..	..	..	..	..	..	1	..	..	..	1	..	Croup .....
3	..	9	4	2	3	1	1	8	1	2	3	99	50	Diarrhœa .....
1	.	1	..	..	..	..	..	..	..	2	..	10	6	Dysentery .....
.	..	3	..	..	..	..	1	1	..	1	1	61	63	Continued Fever ....
.	..	..	..	..	..	..	..	..	..	..	..	4	6	Erysipelas .....
2	2	3	2	1	..	1	..	..	4	4	..	72	47	Rheumatism .....
.	..	2	..	..	..	..	..	1	..	..	2	17	8	Neuralgic Affections ..
.	..	2	..	1	..	..	..	2	..	2	1	41	21	Constitutional Syphilis
3	..	6	..	1	1	..	..	..	..	4	1	54	48	Phthisis .....
1	..	..	..	..	..	..	..	..	..	..	2	4	12	Insanity .....
2	1	14	8	..	1	9	6	12	6	9	2	211	154	Bronchitis, Influenza, and Catarrah ....
.	1	1	..	..	..	..	..	1	..	1	..	15	9	Pleurisy & Pneumonia.
2	..	7	..	..	..	..	1	..	..	..	2	75	65	Skin Disease.....
2	..	9	..	..	3	..	1	4	..	7	1	67	76	Dyspepsia .....
9	7	82	3	3	4	4	6	47	5	27	5	742	588	Accidents and diseases not classified.....
5	11	139	17	9	14	15	16	82	16	59	20	1497	1218	TOTAL.....

DEATHS. 28

Small-pox	..	
Chicken-pox	..	
Measles	..	
Scarlatina	..	
Diphtheria	..	
Whooping-cough	..	
Croup	1	
Diarrhœa	4	
Dysentery	..	
Continued Fever	3	
Erysipelas	..	
Rheumatism	..	
Neuralgic Affections	..	
Constitutional Syphilis	1	
Phthisis	3	
Insanity	..	
Bronchitis, Influenza, and Catarrah	1	
Pleurisy & Pneumonia.	1	
Skin Disease	..	
Dyspepsia	..	
Accidents and diseases not classified	23	
TOTAL	37	

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
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Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..	1	1	9
Whooping-cough	..	..	1	..	..	3	..	1	..	1	..	6	13
Scarlatina	..	2	1	..	..	..	..	..	..	..	..	3	3
Diarrhœa	1	3	2	4	5	1	4	1	3	3	1	28	33
Fever	2	2	2	1	..	..	..	‡2	..	2	1	12	19
Diseases of the Lungs	5	6	2	1	..	3	4	..	3	5	2	31	34
Other causes	16	†19	21	17	15	‡5	11	5	4	‖27	7	147	96
TOTAL NO. OF DEATHS.	24	32	29	23	20	12	19	9	10	38	12	228	207
TOTAL NO. OF BIRTHS.	49	38	14	13	18	29	30	8	22	51	18	290	297

* Return from Pendleton District commenced June 28.

† 9 Inquests. ‡ 1 Inquest. ‡ Typhus. ‖ 15 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 28th June.	4 Weeks ending 26th July.	5 weeks ending 30th August.	TOTAL.	DISEASES.	4 Weeks ending 28th June.	4 Weeks ending 26th July.	5 Weeks ending 30th August.	TOTAL.
..	1	1	2	.... Small-pox	19	9	13	41
3	2	2	7	.... Chicken-pox	5	7	18	30
31	25	43	99	..... Measles	42	36	32	110
13	14	32	59	.... Scarlatina	5	12	20	37
8	7	3	18	.... Diphtheria	3	..	7	10
31	26	55	112	.. Whooping-cough ..	56	55	59	170
1	2	1	4	..... Croup	3	6	6	15
355	567	1538	2460	.....Diarrhœa.. ...	130	228	562	920
..	4	1	5	.... Dysentery	26	47	58	131
1	2	1	4	..... Cholera	..	..	..	..
20	17	24	61	.... Erysipelas	14	17	28	59
..	..	1	1	.. Puerperal Fever ..	..	..	..	..
23	14	14	51	..... Insanity	37	33	34	104
396	385	467	1248	Bronchitis and Catarrh	530	548	742	1820
11	15	6	32	..... Pleurisy	30	57	51	138
17	23	17	57	... Pneumonia ..				
2	2	5	9	.... Carbuncle	....	..	....	..
3634	3313	4215	11162	Accidents, and all other Diseases	3133	3404	4262	10799
4546	4419	6426	15391	..... TOTAL	4033	4459	5892	14384

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Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, OCTOBER 11, 1862. [No. 115.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKRETH ESQ.	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	30·059	30·045	—	30·060	30·044	
Highest (Unreduced)	30·378	30·333	—	30·418	30·384	
Lowest (Unreduced)	29·796	29·708	—	29·750	29·706	
Range	0·582	0·625	—	0·668	0·678	
Temperature.						
Adopted Mean	52·6	51·3	52·5	51·5	51·6	
Range for Week	23·0	31·0	31·5	29·9	29·2	
Daily Range	11·1	17·7	16·0	15·4	14·3	
Maximum in Shade	65·0	65·0	63·8	63·0	63·2	
Minimum in Shade	42 0	34·0	32·3	33·1	34·0	
Maximum in Sun	—	69·0	78·0	76·4	83·6	
Maximum in Sun: Black bulb in Vacuo	—	85·3	—	—	—	
Minimum on Grass	—	32·0	32·0	32·5	32·0	
Temperature in Ground at surface	—	50·17	—	—	—	
Temperature 6 inches below	—	51·14	—	—	—	
Temperature 12 inches below	—	53·04	—	—	—	
Temperature of Evaporation	50·3	48·8	50·1	49·9	48·6	
Temperature of Dew Point	48·0	46·2	47·7	48·3	45·6	
Temperature of Air—Dew Point	4·6	5·1	4·8	3·2	6·0	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·77	3·53	3·73	3·82	3·46	
Required to Saturate do	0·69	0·73	0·72	0·48	0·86	
Weight of a cubic foot of Air	543·0	544·2	542·7	544·2	543·9	
Degree of Humidity (Saturation—1,000)	0·845	0·830	0·837	0·893	0·800	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	4·63	4·33	4·58	4·69	4·23	
Elastic force of Vapour	0·335	0·313	0·331	0·339	0·306	
Clouds (Covered—10 Clear—0)	—	7·3	—	5·3	6·1	
Prevailing Winds	—	NE, SE.	N, SE.	S, E.	N, NE.	
Rain	—	0·866	0·300	0·715	0·609	
Days on which it fell	—	3	1	3	3	
Ozonometer.						
Moffat (0—10)	—	0·00	0·78	3·21	0·0 0	
Schonbein (0—10)	—	0·00	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·062	0·065	0·065	0·042	0·076	
Weekly Evaporation	0·434	0·455	0·455	0·294	0·532	

There were 3 barometric oscillations during the week, the amount being 1·565 inches. There were 3 temperature oscillations, the amount being 47·7°.

The mean temperature of the week was 2·6° above the average of the last thirteen years; and 3·2° below the corresponding week last year.

The mean temperature of the week was the highest at the Royal Infirmary and the lowest at Old Trafford,

The degree of humidity was the highest at Thelwall and the least at Eccles.

Ozone was not found during the week at Old Trafford or Eccles, but it occurred upon 3 days at Bowdon and 5 days at Thelwall.

The temperature, at 8 a.m., during the week has been very variable, and has shown a September temperature on some days, and has also, on one day, shown a January one.

Old Trafford, Manchester,
October 15, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Durr

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
DISEASES.	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	1	3	..	..	..	..	4	..	..	2	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Measles	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Scarlatina	1	..	..	..	1	3	5	..	..	..	..	..	..	..	3
Diphtheria	..	..	..	..	..	1	1	..	..	1	..	..	..	..	1
Whooping-cough	..	5	..	..	..	..	5	1	..	..	1	..	..	1	..
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	6	3	1	7	6	23	..	..	17	1	1	..	24	4
Dysentery	1	..	..	..	..	..	1	..	..	3	..	..	..	5	1
Continued Fever	..	14	6	..	..	2	22	5	2	..	..	1	2	11	1
Erysipelas	..	..	..	..	..	..	..	..	..	1	..	..	2	1	..
Rheumatism	1	..	2	9	2	..	14	2	1	23	1	3	2	..	..
Neuralgic Affections	..	..	1	..	..	..	1	..	..	5	..	..	..	1	..
Constitutional Syphilis	1	..	..	..	..	..	1	4	..	11	..	..	1	..	1
Phthisis	..	..	3	..	..	3	6	5	..	17	2	2	1	..	4
Insanity	..	..	..	1	..	..	1	1	..	1	..	..	..	..	..
Bronchitis, Influenza & Catarrh	1	19	21	13	14	4	72	9	1	59	4	1	3	18	1
Pleurisy and Pneumonia	..	..	1	..	..	..	1	..	..	7	1	..	..	1	2
Skin Diseases	2	4	..	1	1	..	8	7	..	23	..	..	..	4	4
Dyspepsia	1	8	2	1	5	1	18	1	..	19	..	..	1	..	3
Accidents and diseases not classified	24	67	22	20	17	15	165	32	30	259	14	9	11	52	8
TOTAL	33	126	61	46	47	36	349	67	34	448	24	17	23	119	33

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) " T. W. DYSON,
(3) " JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) " EVAN THOMAS,
(7) " J. BROADBENT,
(8) " M. ROWLAND DAY,

(9) (10) Mr. W. J. MALLETT,
(11) " W. H HUGHES,
(12) " C. H. BRADDON,

ANITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

nding Saturday, the 11th day of October, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.					
... 1,329				.... 477.			.. 646. ..		508.	..... .2650.....				Area in Statute Acres.	
... 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448				Population in 1861.	
OOR LAW DIS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.											
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
16	17	18	19	20	21	22	23	24	25	26	27				28
..	..	..	..	..	..	..	..	..	..	..	..	6	1	Small-pox	..
..	..	..	..	..	..	..	..	..	..	..	..	1	..	Chicken-pox	..
..	..	..	..	..	..	3	1	4	..	..	..	9	25	Measles	1
..	..	..	..	..	..	..	..	..	..	..	..	8	6	Scarlatina	1
..	..	..	..	..	..	..	..	..	..	..	..	3	..	Diphtheria	..
..	..	..	..	..	..	1	..	2	..	..	1	12	29	Whooping-cough	..
..	..	..	..	..	..	1	..	1	..	1	..	3	2	Croup	1
2	..	1	8	1	..	..	..	14	1	2	3	104	40	Diarrhœa	5
1	..	..	..	..	..	..	..	..	2	1	1	15	2	Dysentery	..
1	..	2	..	1	1	2	..	..	..	1	2	54	74	Continued Fever	3
..	..	2	..	1	..	..	..	..	..	..	..	7	5	Erysipelas	..
3	2	9	2	..	1	1	..	2	3	4	2	75	54	Rheumatism	..
..	..	5	..	..	..	..	..	1	..	..	..	13	9	Neuralgic Affections ..	..
..	..	4	..	..	..	..	..	..	..	3	2	27	20	Constitutional Syphilis	1
1	..	9	..	..	..	..	1	..	..	5	..	53	52	Phthisis	1
1	..	..	..	..	..	..	..	..	..	..	3	7	3	Insanity	..
8	2	19	8	6	2	12	6	3	3	8	3	248	198	Bronchitis, Influenza, and Catarrah	3
..	..	5	..	..	2	..	2	..	..	2	..	23	24	Pleurisy & Pneumonia.	3
1	..	9	..	1	1	..	2	2	..	..	2	64	36	Skin Disease.....	..
1	..	8	..	2	2	3	2	1	2	6	..	69	66	Dyspepsia	..
23	7	89	3	4	3	3	6	39	11	30	4	805	646	Accidents and diseases not classified.....	14
42	11	162	21	16	12	26	20	69	22	63	23	1606	1292	TOTAL.....	33

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

(18) Mr. J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.

(23) Mr. W. B. MIDWOOD,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON.
(27) ,, J.V.L.WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bowe.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	1	..	..	..	..	..	..	2	..	..	3	6
Whooping-cough	1	..	..	1	..	3	1	..	..	..	..	6	4
Scarlatina	..	1	1	..	..	..	..	..	..	..	..	2	1
Diarrhœa	4	2	1	3	1	2	2	1	1	2	2	21	28
Fever	..	..	2	..	..	2	..	1	‡1	..	..	6	18
Diseases of the Lungs	2	7	1	5	..	4	1	..	2	11	..	33	32
Other causes	11	†12	15	10	7	6	16	7	18	8	6	116	129
TOTAL NO. OF DEATHS.	18	23	20	19	8	17	20	9	24	21	8	187	218
TOTAL NO. OF BIRTHS.	47	40	16	13	13	26	26	19	26	54	25	305	294

* Return from Pendleton District commenced June 28.
† Cholera. ‡ Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th July.	5 weeks ending 30th August.	4 Weeks ending 27th September.	TOTAL.	DISEASES.	4 Weeks ending 26th July.	5 Weeks ending 30th August.	4 Weeks ending 27th September.	TOTAL.
1	1	11	13	.... Small-pox	9	13	19	41
2	2	15	19	.... Chicken-pox	7	18	8	33
25	43	51	119	..... Measles	36	32	29	97
14	32	65	111	.... Scarlatina	12	20	26	58
7	3	5	15	.... Diphtheria	..	7	1	8
26	55	43	124	.. Whooping-cough ..	55	59	50	164
2	1	4	7	..... Croup	6	6	9	21
567	1538	1297	3402	.....Diarrhœa.. ...	228	562	464	1254
4	1	3	8	.... Dysentery	47	58	36	141
2	1	..	3	..... Cholera	..	..	..	..
17	24	27	68	.... Erysipelas	17	28	31	76
..	1	..	1	.. Puerperal Fever ..	..	..	..	..
14	14	14	42	..... Insanity	33	34	22	89
385	467	460	1312	Bronchitis and Catarrh	548	742	685	1975
15	6	9	30	..... Pleurisy	57	51	62	170
23	17	15	55	... Pneumonia ..				
2	5	8	15	.... Carbuncle	..	....	....	..
3313	4215	3355	10883	Accidents, and all other Diseases	3404	4262	3402	11068
4419	6426	5382	16227	..... TOTAL	4459	5892	4844	15195

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Barometer.	INS.	INS.		INS.	INS.	
Mean @ 32° F.	29·485	29·502		29·539	29·500	
Highest (Unreduced)	29·798	29·782		29·866	29·805	
Lowest (Unreduced)	29·338	29·220		29·375	29·292	
Range	0·460	0·562		0·491	0·513	
Temperature.						
Adopted Mean	50·9	50·3		50·8	50·5	
Range for Week	20·5	23·2		22·6	22·8	
Daily Range	8·4	12·1		10·6	9·9	
Maximum in Shade	62·0	62·2		62·0	61·7	
Minimum in Shade	41·5	39·0		39·4	38·9	
Maximum in Sun	—	68·2		76·3	83·1	
Maximum in Sun: Black bulb in Vacuo	—	86·0		—	—	
Minimum on Grass	—	36·0		36·5	38·1	
Temperature in Ground at surface	—	49·53		—	—	
Temperature 6 inches below	—	50·24		—	—	
Temperature 12 inches below	—	51·81		—	—	
Temperature of Evaporation	48·4	48·1		48·4	47·3	
Temperature of Dew Point	45·8	45·8		45·9	43·9	
Temperature of Air—Dew Point	5·1	4·5		4·9	6·6	
Hygrometrical condition of the Atmosphere	GRS.	GRS.		GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·53	3·50		3·54	3·31	
Required to Saturate do	0·66	0·63		0·64	0·84	
Weight of a cubic foot of Air	534·4	535·3		535·5	535·6	
Degree of Humidity (Saturation—1,000)	0·827	0·849		0·840	0·788	
	INS.	INS.		INS.	INS.	
Water in a vertical column of the Atmosphere	4·26	4·26		4·27	3·97	
Elastic force of Vapour	0·308	0·308		0·309	0·287	
Clouds (Covered—10 Clear—0)	—	7·1		5·3	7·8	
Prevailing Winds	—	SE.		W.	SW.	
Rain	—	1·807		1·500	1·290	
Days on which it fell	—	6		5	7	
Ozonometer.						
Moffat (0—10)	—	4·14		6·21	1·00	
Schonbein (0—10)	—	3·43		—	—	
	INS.	INS.		INS.	INS.	
Daily Evaporation	0·065	0·057		0·062	0·080	
Weekly Evaporation	0·455	0·399		0·434	0·560	

NO RETURN. NO RETURN.

There were 10 barometric oscillations during the week, the amount being 2·199 inches. There were 5 temperature oscillations at 8 a. m. the amount being 30·2°.

The mean temperature of the week was 1·1° above the average of the last thirteen years; and 1·8° below the corresponding week last year.

The mean temperature was nearly uniform at all the stations, the mean daily range being the greatest at Old Trafford and the least at the Royal Infirmary.

The degree of humidity was the highest at Old Trafford and the least at Eccles.

Ozone occurred upon 5 days at Old Trafford, 7 at Thelwall, and 2 at Eccles.

Thunder and lightning occurred upon the 16th, both at Old Trafford and Thelwall.

The fall of rain during the week was very heavy at all the stations.

Old Trafford, Manchester,
October 22, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SAL

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Duri

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	2	2	..	..	..	..	..	..	..	1
Scarlatina	..	..	..	..	1	3	4	..	..	..	1	..	2	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	3	..	..	..	..	3	..	..	6	..	..	..	5	..
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa.....	2	3	2	1	4	3	15	4	..	4	2	..	..	16	4
Dysentery	1	1	..	1	..	..	3	..	..	2	..	..	..	1	1
Continued Fever.....	3	*4	5	6	1	2	21	4	3	..	1	1	..	3	..
Erysipelas	1	..	..	..	..	..	1	1	..	2	..	1	..	1	..
Rheumatism	..	4	1	4	3	..	12	..	..	16	5	..	2	..	..
Neuralgic Affections	..	..	..	..	..	..	..	1	1	4	1	..	..	..	1
Constitutional Syphilis	2	..	..	..	..	1	3	3	..	6	1	..	..	..	2
Phthisis	2	..	..	..	1	..	3	4	..	14	..	..	3	1	3
Insanity	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	5	24	19	13	15	12	88	7	1	40	10	3	4	7	4
Pleurisy and Pneumonia....	1	..	..	1	..	1	3	..	..	1	..	..	1	1	2
Skin Diseases.....	1	..	..	..	3	1	5	5	1	18	..	..	..	4	1
Dyspepsia	1	2	3	2	1	1	10	2	1	16	..	..	1	1	1
Accidents and diseases not classified.....	19	13	13	13	24	31	113	33	36	252	3	7	7	40	3
TOTAL	38	54	43	41	54	57	287	67	43	381	24	12	20	80	23

* 1 Gastric.

Medical Officers to whom the Associatio

(1) Mr. R. M. MANN.
(2) ,, T. W. DYSON,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, J. BROADBENT,
(8) ,, M. ROWLAND DAY,

(9) (10) Mr. W. J. MALLETT,
(11) ,, W. H HUGHES,
(12) ,, C. H. BRADDON,

ANITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

ending Saturday, the 18th day of October, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK.	PENDLETON AND PENDLEBURY.					
... 1,329				.... 477.			.. 646. ..		508.	..... 2650.....				Area in Statute Acres.	
.... 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448.....				Population in 1861.	
Poor Law Dis.	Public Institutions.			Poor Law Districts.											
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
16	17	18	19	20	21	22	23	24	25	26	27				28
1	1	..	..	..	..	..	..	†1	..	2	..	6	..	Small-pox	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox	..
..	..	..	..	..	..	3	3	4	..	..	..	13	19	Measles	1
..	..	..	..	..	..	..	..	..	..	..	..	7	5	Scarlatina	2
..	..	..	..	..	..	2	..	..	..	..	..	2	..	Diphtheria	2
..	..	1	..	..	..	1	2	..	..	..	1	19	19	Whooping-cough	..
..	..	..	..	..	..	..	..	..	..	..	..	..	1	Croup	..
4	1	3	6	..	1	..	1	4	..	2	2	71	44	Diarrhœa	1
3	..	1	..	..	..	..	..	..	1	..	1	13	10	Dysentery	..
1	..	4	..	3	2	..	1	..	..	2	3	49	79	Continued Fever	2
..	..	..	..	..	..	..	..	..	1	..	..	7	8	Erysipelas	..
3	1	7	2	..	3	..	..	1	..	5	..	57	49	Rheumatism	..
1	..	3	..	1	..	..	..	..	..	..	1	14	13	Neuralgic Affections ..	..
..	..	4	..	..	..	..	..	3	..	3	..	25	12	Constitutional Syphilis	1
2	..	5	..	..	..	1	..	..	..	5	..	41	41	Phthisis	4
..	1	..	..	..	..	..	..	..	..	..	..	4	2	Insanity	..
7	4	20	4	7	4	13	2	12	7	9	3	259	198	Bronchitis, Influenza, and Catarrh.....	1
..	..	3	..	..	..	..	..	2	1	1	1	16	17	Pleurisy & Pneumonia.	1
3	2	9	..	1	1	..	..	1	..	1	3	56	48	Skin Disease.....	..
1	..	6	..	..	2	2	3	2	1	5	1	55	55	Dyspepsia	..
22	4	100	2	3	6	7	6	29	4	33	4	715	610	Accidents and diseases not classified.....	21
48	14	166	14	15	19	29	18	59	15	68	20	1429	1230	TOTAL..... ...	36

† Confluent.

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

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(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.

(23) Mr. JOSEPH FOSTER,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON.
(27) ,, J.V.L.WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bowei.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	1	..	..	..	..	1	..	..	..	1	3	3
Whooping-cough	..	..	..	1	..	3	..	..	1	..	..	5	5
Scarlatina	..	1	..	..	..	..	..	..	..	1	..	2	..
Diarrhœa	2	2	1	2	3	3	1	2	1	2	1	20	21
Fever	2	1	7	..	†2	..	..	..	3	1	§1	17	21
Diseases of the Lungs	11	6	1	6	..	4	5	..	2	13	6	54	44
Other causes	14	19	12	6	20	‡7	7	2	7	19	6	119	112
TOTAL NO. OF DEATHS.	29	30	21	15	25	17	14	4	14	36	15	220	206
TOTAL NO. OF BIRTHS.	34	29	13	27	20	34	6	13	20	51	20	267	303

* Return from Pendleton District commenced June 28.
† Gastric. ‡ 2 Inquests. § Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th July.	5 weeks ending 30th August.	4 Weeks ending 27th September.	TOTAL.	DISEASES.	4 Weeks ending 26th July.	5 Weeks ending 30th August.	4 Weeks ending 27th September.	TOTAL.
1	1	11	13	.... Small-pox	9	13	19	41
2	2	15	19	.... Chicken-pox	7	18	8	33
25	43	51	119	..... Measles	36	32	29	97
14	32	65	111	.... Scarlatina	12	20	26	58
7	3	5	15	.... Diphtheria	..	7	1	8
26	55	43	124	.. Whooping-cough ..	55	59	50	164
2	1	4	7	..... Croup	6	6	9	21
567	1538	1297	3402	.....Diarrhœa.. ...	228	562	464	1254
4	1	3	8	.... Dysentery	47	58	36	141
2	1	..	3	..... Cholera	..	..	..	..
17	24	27	68	.... Erysipelas	17	28	31	76
..	1	..	1	.. Puerperal Fever ..	..	..	..	..
14	14	14	42	..... Insanity	33	34	22	89
385	467	460	1312	Bronchitis and Catarrh	548	742	685	1975
15	6	9	30	..... Pleurisy	57	51	62	170
23	17	15	55	... Pneumonia ..				
2	5	8	15	.... Carbuncle	..	....	....	..
3313	4215	3355	10883	Accidents, and all other Diseases	3404	4262	3402	11068
4419	6426	5382	16227	..... TOTAL	4459	5892	4844	15195

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

Vol. II.] WEEK ENDING SATURDAY, OCTOBER 25, 1862. [No. 117.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.		INS.	INS.	
Mean @ 32° F.	29·253	29·258		29·285	29·249	
Highest (Unreduced)	29·686	29·760		29·788	29·730	
Lowest (Unreduced)	28·896	28·502		28·910	28·844	
Range	0·790	1·258		0·878	0·886	
Temperature.						
Adopted Mean	47·3	46·0		46·1	46·2	
Range for Week	21·0	26·0		25·0	26·7	
Daily Range	12·3	14·0		14·6	13·7	
Maximum in Shade	58·0	58·0		59·0	57·7	
Minimum in Shade	37·0	32·0		34·0	31·0	
Maximum in Sun	—	65·4		62·5	63·4	
Maximum in Sun: Black bulb in Vacuo	—	70·0		—	—	
Minimum on Grass	—	30·0		32·0	29·1	
Temperature in Ground at surface	—	44·44		—	—	
Temperature 6 inches below	—	45·04		—	—	
Temperature 12 inches below	—	47·12		—	—	
Temperature of Evaporation	44·0	43·6		43·4	43·4	
Temperature of Dew Point	40·3	40·8		40·3	40·2	
Temperature of Air—Dew Point	7·0	5·2		5·8	6·0	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.		GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·87	2·98		2·91	2·90	
Required to Saturate do	0·86	0·62		0·70	0·72	
Weight of a cubic foot of Air	534·4	536·0		536·3	535·6	
Degree of Humidity (Saturation—1,000)	0·772	0·832		0·812	0·806	
	INS.	INS.		INS.	INS.	
Water in a vertical column of the Atmosphere	3·46	3·55		3·46	3·44	
Elastic force of Vapour	0·250	0·255		0·250	0·249	
Clouds (Covered—10 Clear—0)	—	9·0		8·3	9·2	
Prevailing Winds	—	S.NW		W.NW	W.SW	
Rain	—	1·909		1·878	1·900	
Days on which it fell	—	7		7	7	
Ozonometer.						
Moffat (0—10)	—	5·86		6·36	2·14	
Schonbein (0—10)	—	4·28		—	—	
	INS.	INS.		INS.	INS.	
Daily Evaporation	0·077	0·056		0·062	0·064	
Weekly Evaporation	0·539	0·392		0·434	0·448	

NO RETURN. NO RETURN.

There were 7 barometric oscillations during the week, the amount being 4·259 inches. There were 4 temperature oscillations at 8 a. m. the amount being 25·9°.

The mean temperature of the week was 0·9° below the average of the last thirteen years; and 7·9° below the corresponding week last year.

Ozone occurred upon 7 days at Old Trafford, 7 at Thelwall, and 4 at Eccles.

The past week has been marked by an uuusual amount of barometric disturbance, accompanied by thunder and lightning, heavy rain, and very violent storms of hail. The storm of the 19th was the most severe that has occurred for many years.

Old Trafford, Manchester,
October 31, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALFO

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC IN

New Cases of Disease coming under Treatment During

MANCHESTER.

Area in Statute Acres ..... Manchester Township 1,645 .....
Population in 1861 ..... „ „ 185,050 .....

DISEASES.	Poor Law Districts.							Public Institutions.								
									Royal Infirmary.					Children		
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.	City Gaol.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14	15
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	2	..	..	..	3	5	..	..	..	..	..	2	..	3	..
Scarlatina	..	..	..	4	1	5	10	..	..	..	1	2	2	..	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	2	..	..	..	..	2	..	..	..	1	..	..	3	1	..
Croup	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
Diarrhœa	6	7	1	..	3	2	19	3	..	12	1	..	1	17	5	2
Dysentery	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..
Continued Fever	1	5	2	2	..	2	12	7	1	..	1	1	1	5	..	..
Erysipelas	..	..	..	..	..	..	..	1	..	5	..	..	..	..	..	..
Rheumatism	4	5	..	2	..	..	11	6	3	10	..	..	1	2	1	1
Neuralgic Affections	..	..	..	..	..	..	..	..	..	7	..	..	..	..	..	..
Constitutional Syphilis	..	..	..	..	..	..	..	3	..	15	1	..	..	3	..	..
Phthisis	1	..	1	..	..	1	3	5	..	25	4	..	4	1	6	..
Insanity	..	..	..	1	..	..	1	1	..	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	5	18	15	9	18	11	76	8	..	32	5	3	1	18	3	1
Pleurisy and Pneumonia	2	..	..	..	..	..	2	2	..	..	..	..	..	..	2	..
Skin Diseases	1	3	2	1	2	1	10	13	..	30	..	..	..	12	4	..
Dyspepsia	1	7	..	1	2	2	13	1	3	38	2	..	..	7	..	..
Accidents and diseases not classified	34	38	17	14	14	11	128	42	36	200	7	4	3	47	4	2
TOTAL	55	87	38	34	40	39	293	93	43	374	23	10	15	116	30	6

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) „ T. W. DYSON,
(3) „ JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) „ EVAN THOMAS,
(7) „ J. BROADBENT,
(8) „ M. ROWLAND DAY,

(9) (10) Mr. W. J. MALLETT,
(11) „ W. H HUGHES,
(12) „ C. H. BRADDON,

NITARY ASSOCIATION.

OF MANCHESTER AND ADJOINING DISTRICTS.

ing Saturday, the 25th day of October, 1862.

ALFORD.			HULME.			CHORL-TON.		ARD-WICK	PENDLETON AND PENDLEBURY.					
1,329			.... 477.			.. 646. ..		508.	..... 2650.....				Area in Statute Acres.	
70,967.			.. 68,209. ..			.. 44,850 ..		21739	.....24,448.....				Population in 1861.	
PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.											
Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Work-house.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
17	18	19	20	21	22	23	24	25	26	27				28
..	1	..	..	..	..	..	..	..	1	..	2	..	Small-pox	..
..	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox	..
..	..	..	..	2	..	4	2	..	..	..	18	15	Measles	..
..	..	..	..	2	..	..	..	..	..	..	17	4	Scarlatina	4
..	..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria	..
..	1	..	..	1	1	..	1	..	..	4	15	29	Whooping-cough	..
..	2	..	..	..	..	..	1	..	..	1	5	..	Croup	2
..	1	4	2	5	1	1	1	..	3	..	79	41	Diarrhœa	3
..	1	..	..	..	..	..	..	..	..	2	8	3	Dysentery	..
..	2	..	..	..	2	1	..	..	3	3	39	60	Continued Fever	1
1	1	..	..	..	..	..	..	..	..	1	9	4	Erysipelas	..
..	7	..	1	1	1	1	6	3	6	1	62	51	Rheumatism	..
..	2	..	2	..	..	..	..	..	..	..	11	13	Neuralgic Affections ..	..
1	2	..	..	..	..	..	1	..	3	1	30	15	Constitutional Syphilis	..
..	3	..	..	..	1	1	1	..	..	1	55	55	Phthisis	8
2	..	..	..	..	..	..	..	..	..	..	4	3	Insanity	..
1	21	6	4	6	9	7	10	3	10	3	236	201	Bronchitis, Influenza, and Catarrh.....	7
1	..	..	..	..	1	..	2	2	1	..	13	12	Pleurisy & Pneumonia.	5
..	2	..	..	..	2	1	3	..	2	2	83	54	Skin Disease.....	..
..	9	..	2	3	2	2	4	..	4	..	91	80	Dyspepsia	..
9	58	2	5	6	7	6	31	2	28	6	648	574	Accidents and diseases not classified.....	19
15	113	12	16	26	27	24	63	10	61	25	1425	1214	TOTAL.....	49

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Choriton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	1
Measles	..	1	..	..	1	..	..	..	..	..	1	3	4
Whooping-cough	..	..	..	1	..	1	..	..	1	..	..	3	9
Scarlatina	1	4	1	..	..	..	..	..	1	..	..	7	5
Diarrhœa	4	1	..	3	1	5	2	2	2	3	..	23	17
Fever	1	†1	1	†1	..	..	..	..	..	..	..	4	16
Diseases of the Lungs	6	4	2	4	..	4	2	..	6	13	4	45	47
Other causes	12	10	13	9	17	‡5	11	3	10	14	7	111	103
TOTAL NO. OF DEATHS.	24	21	17	18	19	15	15	5	20	30	12	196	202
TOTAL NO. OF BIRTHS.	34	32	8	22	13	27	10	24	22	49	20	261	289

* Return from Pendleton District commenced June 28.
† Typhus. ‡ 2 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

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4 Weeks ending 26th July.	5 weeks ending 30th August.	4 Weeks ending 27th September.	TOTAL.	DISEASES.	4 Weeks ending 26th July.	5 Weeks ending 30th August.	4 Weeks ending 27th September.	TOTAL.
1	1	11	13	.... Small-pox	9	13	19	41
2	2	15	19	.... Chicken-pox	7	18	8	33
25	43	51	119	..... Measles	36	32	29	97
14	32	65	111	.... Scarlatina	12	20	26	58
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HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

Vol. II.] WEEK ENDING SATURDAY, NOVEMBER 1, 1862. [No. 118.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. Day, Esq.	Old Trafford, G. V. Vernon, Esq.	Bowdon, Alderman Neild.	Thelwall, J. Atkinson, Esq.	Eccles, T. Mackereth Esq	Ollerenshaw, A. Neild, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·629	29·660	—	29·680	29·655	
Highest (Unreduced)	29·834	29·917	—	29·958	29·888	
Lowest (Unreduced)	29·414	29·428	—	29·476	29·124	
Range	0·390	0·489	—	0·482	0·464	
Temperature.						
Adopted Mean	45·4	44·5	43·5	45·1	45·4	
Range for Week	22·5	29·3	27·0	29·0	28·0	
Daily Range	11·8	15·8	15·1	12·4	11·2	
Maximum in Shade	56·0	57·3	55·0	55·0	54·9	
Minimum in Shade	33·5	28·0	28·0	26·0	26·9	
Maximum in Sun	—	63·8	69·8	68·0	71·4	
Maximum in Sun: Black bulb in Vacuo	—	69·2	—	—	—	
Minimum on Grass	—	20·0	25·2	26·3	23·4	
Temperature in Ground at surface	—	43·46	—	—	—	
Temperature 6 inches below	—	44·00	—	—	—	
Temperature 12 inches below	—	45·64	—	—	—	
Temperature of Evaporation	42·9	42·2	41·7	43·7	43·1	
Temperature of Dew Point	40·0	39·5	39·6	42·1	40·5	
Temperature of Air—Dew Point	5·4	5·0	3·9	3·0	4·9	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·84	2·79	2·79	3·03	2·88	
Required to Saturate do	0·64	0·56	0·46	0·39	0·60	
Weight of a cubic foot of Air	543·4	544·9	546·1	544·6	543·8	
Degree of Humidity (Saturation—1,000)	0·819	0·826	0·861	0·893	0·833	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	3·42	3·35	3·36	3·71	3·48	
Elastic force of Vapour	0·247	0·242	0·243	0·268	0·252	
Clouds (Covered—10 Clear—0)	—	7·4	—	5·3	8·0	
Prevailing Winds	—	S.E	SE,SW.	SE.W	SW.W	
Rain	—	0·357	0·210	0·690	0·340	
Days on which it fell	—	5	4	4	5	
Ozonometer.						
Moffat (0—10)	—	3·28	1·36	5·36	0·71	
Schonbein (0—10)	—	2·00	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·057	0·052	0·040	0·033	0·052	
Weekly Evaporation	0·399	0·364	0·280	0·231	0·364	

There were 5 barometric oscillations during the week, the amount being 1·558 inches. There were 3 temperature oscillations, the amount being 46·4°.

The mean temperature of the week was 0·5° below the average of the last thirteen years; and 0·5° below the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and Eccles, and the lowest at Bowdon.

The degree of humidity was the highest at Thelwall and the lowest at the Royal Infirmary.

Ozone occurred upon 3 days at Old Trafford, 3 days at Bowdon, 6 days at Thelwall, and 2 days at Eccles.

There was hard frost at all the stations upon the 30th October.

Old Trafford, Manchester,
November 5, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC I

New Cases of Disease coming under Treatment During

MANCHESTER.

Area in Statute Acres ..... Manchester Township 1,645 .....
Population in 1861 ..... „ „ 185,050 .....

DISEASES.	Poor Law Districts.							Public Institutions.								
									Royal Infirmary.					Children		
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.	City Co
	1	2	3	4	5	6		7	8	9	10	11	12	13	14	1
Small-pox	..	..	..	1	..	..	1	2	..	..	..	..	..	..	..	.
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	.
Measles	1	6	..	2	..	3	12	..	..	..	..	..	1	..	..	.
Scarlatina	..	..	..	..	..	2	2	..	3	1	1	..	6	..	..	.
Diphtheria	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	.
Whooping-cough	..	2	..	..	..	..	2	..	..	..	..	..	..	2	..	.
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Diarrhœa	3	3	1	1	5	..	13	..	..	16	..	..	1	15	7	
Dysentery	1	..	..	1	..	..	2	1	..	3	..	..	..	2	..	
Continued Fever	1	4	3	6	..	3	17	7	1	..	3	..	3	11	3	
Erysipelas	..	..	..	..	..	..	..	..	..	..	4	..	..	1	..	
Rheumatism	2	6	3	5	4	1	21	3	..	21	2	..	1	..	..	
Neuralgic Affections	..	..	..	..	..	..	..	..	1	..	..	..	1	..	3	
Constitutional Syphilis	1	2	1	..	..	..	4	1	..	27	..	..	..	1	..	
Phthisis	..	3	..	2	1	2	8	4	1	30	3	..	1	2	2	
Insanity	..	..	..	1	..	..	1	1	..	..	..	..	..	..	..	
Bronchitis, Influenza & Catarrh	6	20	14	3	24	7	74	16	..	48	5	3	2	7	1	
Pleurisy and Pneumonia	3	4	..	..	..	..	7	..	..	..	1	..	..	..	3	
Skin Diseases	3	8	1	3	3	..	18	13	1	23	..	..	..	11	4	
Dyspepsia	2	2	2	2	2	..	10	2	..	37	1	..	1	3	2	
Accidents and diseases not classified	33	19	18	14	20	18	122	51	30	237	6	12	7	43	..	
TOTAL	56	80	43	41	59	36	315	101	37	443	26	15	24	99	25	

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) „ T. W. DYSON,
(3) „ JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) „ EVAN THOMAS,
(7) „ J. BROADBENT,
(8) „ M. ROWLAND DAY,

(9) (10) (11) (12) Mr. W. J. MALLETT, „ W. H HUGHES, „ C. H. BRADDON,

NITARY ASSOCIATION.

S OF MANCHESTER AND ADJOINING DISTRICTS.

ing Saturday, the 1st day of November, 1862.

SALFORD.	HULME.	CHORLTON.	ARDWICK.	PENDLETON AND PENDLEBURY.	
1,329	477	646	508	2650	Area in Statute Acres.
70,967	68,209	44,850	21739	24,448	Population in 1861.

R W S.	Public Institutions.			Poor Law Districts.											
	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
	17	18	19	20	21	22	23	24	25	26	27				28
	..	..	..	..	1	..	..	..	..	..	..	4	..	Small-pox	..
	..	..	..	..	..	..	..	..	..	..	..	1	..	Chicken-pox	..
	..	..	..	..	..	..	1	4	..	2	..	20	22	Measles	..
	..	..	..	..	..	..	..	..	..	3	..	16	4	Scarlatina	4
	..	..	..	..	..	..	..	..	..	..	..	1	..	Diphtheria	1
	..	1	..	..	..	..	..	..	1	..	4	11	35	Whooping-cough	..
	..	..	..	1	..	..	1	..	..	..	..	2	2	Croup	..
	1	1	5	1	1	2	..	2	..	2	4	76	44	Diarrhœa	4
	..	..	..	..	..	..	..	..	..	..	1	10	3	Dysentery	..
	..	2	..	1	..	..	1	1	..	2	1	53	71	Continued Fever	4
	..	1	..	..	..	..	..	..	..	..	..	6	3	Erysipelas	..
	2	4	2	..	1	..	1	3	2	5	3	72	53	Rheumatism	..
	..	2	..	2	..	..	..	..	..	..	..	9	12	Neuralgic Affections	..
	2	4	..	..	..	..	..	..	..	3	1	44	21	Constitutional Syphilis	1
	..	5	..	1	1	..	1	..	1	3	1	64	43	Phthisis	5
	1	..	..	..	..	1	..	..	..	..	..	4	7	Insanity	..
	5	23	8	2	4	10	4	9	3	9	3	248	206	Bronchitis, Influenza, and Catarrh	4
	..	3	..	..	..	1	..	1	3	1	..	20	24	Pleurisy & Pneumonia.	1
	3	4	..	..	1	2	..	4	..	3	..	91	42	Skin Disease	..
	..	8	..	2	3	1	2	2	..	5	2	81	71	Dyspepsia	..
	1	72	2	2	6	7	14	33	13	26	6	706	588	Accidents and diseases not classified	16
	15	130	17	12	18	24	25	59	23	64	26	1539	1251	TOTAL	40

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

(18) Mr. J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.

(23) Mr. JOSEPH FOSTER
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON.
(27) ,, J.V.L.WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	1	..	..	..	..	..	..	..	1	..	2	8
Whooping-cough	..	..	..	..	..	1	..	..	2	..	..	3	16
Scarlatina	2	1	1	..	..	..	1	..	..	1	..	6	2
Diarrhœa	1	1	..	..	3	1	..	1	..	1	..	8	11
Fever	1	..	..	..	..	..	..	..	†1	†1	..	3	10
Diseases of the Lungs	6	6	1	7	..	8	4	..	3	6	3	44	56
Other causes	17	12	13	7	15	7	6	12	5	10	5	109	107
TOTAL NO. OF DEATHS.	27	21	15	14	18	17	11	13	11	20	8	175	210
TOTAL NO. OF BIRTHS.	47	30	9	20	20	26	37	22	39	54	13	322	294

* Return from Pendleton District commenced June 28.
† Typhus.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 26th July.	5 weeks ending 30th August.	4 Weeks ending 27th September.	TOTAL.	DISEASES.	4 Weeks ending 26th July.	5 Weeks ending 30th August.	4 Weeks ending 27th September.	TOTAL.
1	1	11	13	.... Small-pox	9	13	19	41
2	2	15	19	.... Chicken-pox	7	18	8	33
25	43	51	119	..... Measles	36	32	29	97
14	32	65	111	.... Scarlatina	12	20	26	58
7	3	5	15	.... Diphtheria	..	7	1	8
26	55	43	124	.. Whooping-cough ..	55	59	50	164
2	1	4	7	..... Croup	6	6	9	21
567	1538	1297	3402	.....Diarrhœa.. ...	228	562	464	1254
4	1	3	8	.... Dysentery	47	58	36	141
2	1	..	3	..... Cholera	..	..	..	..
17	24	27	68	.... Erysipelas	17	28	31	76
..	1	..	1	.. Puerperal Fever ..	..	..	..	..
14	14	14	42	..... Insanity	33	34	22	89
385	467	460	1312	Bronchitis and Catarrh	548	742	685	1975
15	6	9	30	..... Pleurisy	57	51	62	170
23	17	15	55	... Pneumonia ..				
2	5	8	15	.... Carbuncle	..	....	....	..
3313	4215	3355	10883	Accidents, and all other Diseases	3404	4262	3402	11068
4419	6426	5382	16227	..... TOTAL	4459	5892	4844	15195

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, NOVEMBER 8, 1862. [No. 119.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, Esq.	Old Trafford, G. V. VERNON, Esq.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, Esq.	Eccles, T. MACKRETH Esq	Ollerenshaw, A. NEILD, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·955	29·959	—	29·991	29·958	
Highest (Unreduced)	30·186	30·278	—	30·332	30·260	
Lowest (Unreduced)	29·848	29·731	—	29·900	29·777	
Range	0·238	0·547	—	0·432	0·483	
Temperature.						
Adopted Mean	44·1	42·2	42·0	42·4	42·0	
Range for Week	20·0	26·5	25·5	25·7	27·4	
Daily Range	9·6	13·7	12·6	11·3	12·3	
Maximum in Shade	56·0	57·2	55·5	54·7	56·9	
Minimum in Shade	36 0	30·7	30·0	29·0	29·5	
Maximum in Sun	—	66·0	65·2	67·8	64·3	
Maximum in Sun: Black bulb in Vacuo	—	75·0	—	—	—	
Minimum on Grass	—	26·0	30·9	29·2	28·3	
Temperature in Ground at surface	—	42·22	—	—	—	
Temperature 6 inches below	—	43·09	—	—	—	
Temperature 12 inches below	—	44·79	—	—	—	
Temperature of Evaporation	42·3	41·2	41·2	41·9	41·2	
Temperature of Dew Point	40·2	40·0	40·2	41·3	40·2	
Temperature of Air—Dew Point	3·9	2·2	1·8	1·1	1·8	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·85	2·84	2·86	3·03	2·86	
Required to Saturate do	0·46	0·28	0·24	0·11	0·24	
Weight of a cubic foot of Air	550·8	552·9	553·0	553·3	553·0	
Degree of Humidity (Saturation—1,000)	0·858	0·920	0·936	0·960	0·936	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	3·44	3·42	3·44	3·58	3·44	
Elastic force of Vapour	0·249	0·247	0·249	0·260	0·249	
Clouds (Covered—10 Clear—0)	—	9·0	—	9·3	8·5	
Prevailing Winds	—	S.E	SE,S	S.	SE.SW	
Rain	—	0·515	0·110	0·240	0·667	
Days on which it fell	—	3	4	3	3	
Ozonometer.						
Moffat (0—10)	—	0·00	1·14	1·36	0·71	
Schonbein (0—10)	—	0·00	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·040	0·022	0·018	0·011	0·018	
Weekly Evaporation	0·280	0·154	0·126	0·077	01·26	

There were 6 barometric oscillations during the week, the amount being 1 375 inches. There were 6 temperature oscillations at 8 a.m., the amount being 38·4°.

The mean temperature of the week was 1·2° below the average of the last thirteen years; and 3·0° above the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary, and the lowest at Bowdon and Eccles.

The degree of humidity was the highest at Thelwall and the lowest at the Royal Infirmary.

Ozone occurred upon 2 days at Bowdon, 3 days at Thelwall, and 1 day at Eccles. It was not found during the week Old Trafford. Upon the 4th, 5th, 6th, and 7th, there was a large amount of fog, especially on the 7th.

The fall of rain during October has been as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	5·032	22
Bowdon	4·120	—
Thelwall	4·996	22
Eccles	4·240	24

ERRATUM.—In the week ending October 25th, at Thelwall, for lowest barometric reading read 28·538 inches, in place of ·910 inches.

Old Trafford, Manchester,
November 11, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC I

New Cases of Disease coming under Treatment During

MANCHESTER.

Area in Statute Acres ..... Manchester Township 1,645 .....
Population in 1861 ..... „ „ 185,050 .....

DISEASES.	Poor Law Districts.							Public Institutions.								
									Royal Infirmary.					Children		
	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.	
	1	2	3	4	5	6		7	8	9	10	11	12	13	14	1
Small-pox	1	..	..	..	1	..	2	..	..	..	..	..	..	..	..	
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Measles	..	..	1	..	..	10	11	..	..	..	1	..	..	..	..	
Scarlatina	..	..	..	..	2	2	4	..	..	..	..	1	7	1	..	
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Whooping-cough	..	1	..	..	..	..	1	..	..	..	..	..	..	5	..	
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diarrhœa	2	..	2	..	7	..	11	..	..	2	1	..	..	12	6	
Dysentery	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	
Continued Fever	4	1	7	7	2	4	25	10	6	2	2	1	3	5	..	
Erysipelas	..	..	..	..	1	..	1	..	..	2	1	..	..	..	..	
Rheumatism	5	15	5	8	6	4	43	7	1	12	3	1	3	2	..	
Neuralgic Affections	..	..	..	..	..	..	..	4	..	5	..	..	..	..	..	
Constitutional Syphilis	..	..	..	..	..	..	..	15	..	9	..	..	..	2	3	
Phthisis	2	2	..	..	1	2	7	..	..	20	2	..	2	1	2	
Insanity	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	
Bronchitis, Influenza & Catarrh	9	40	18	17	40	8	132	11	..	80	6	3	7	6	8	
Pleurisy and Pneumonia	3	1	..	1	..	2	7	..	..	..	1	..	5	..	1	
Skin Diseases	..	7	..	2	2	..	11	9	1	21	..	..	..	7	1	
Dyspepsia	6	3	..	1	1	..	11	..	1	34	1	..	2	..	..	
Accidents and diseases not classified	36	38	9	19	35	20	157	45	33	251	6	9	15	36	5	
TOTAL	69	108	42	55	98	52	424	102	42	438	24	15	44	77	26	

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) „ T. W. DYSON,
(3) „ JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,

(5) Mr. C. S. BOMPAS,
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(8) „ M. ROWLAND DAY,

(9), (10), (11), (12) Mr. W. J. MALLETT, „ W. H HUGHES, „ C. H. BRADDON,

NITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

nding Saturday, the 8th day of November, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.					
.. 1,329				.... 477.			.. 646. ..		508.	..... 2650.....				Area in Statute Acres.	
.. 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448.....				Population in 1861.	
OOR AW DIS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.											
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
6	17	18	19	20	21	22	23	24	25	26	27				28
..	1	..	..	..	1	..	..	1	..	1	..	6	..	Small-pox	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	Chicken-pox	..
..	..	..	..	..	..	..	1	3	..	..	..	16	29	Measles	..
..	..	..	..	..	..	..	..	..	..	2	..	15	6	Scarlatina	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria	..
..	..	1	..	..	..	1	..	..	1	2	1	12	28	Whooping-cough	1
..	..	..	..	..	..	..	1	..	..	..	..	1	1	Croup	1
..	1	3	4	2	3	..	1	2	..	2	..	52	49	Diarrhœa	..
1	..	..	..	..	..	..	..	..	..	..	1	3	3	Dysentery	..
4	1	1	..	3	..	..	1	1	1	3	2	71	48	Continued Fever	3
..	..	1	..	..	..	..	..	..	..	..	1	6	8	Erysipelas	..
3	1	5	..	2	5	..	..	2	1	6	2	99	31	Rheumatism	..
1	..	3	..	1	..	..	..	..	1	..	3	18	8	Neuralgic Affections ..	..
..	..	5	..	1	..	..	..	..	..	3	1	40	21	Constitutional Syphilis	..
..	1	6	1	..	..	..	2	..	..	2	..	46	39	Phthisis	10
..	..	..	..	..	..	..	..	..	..	..	..	1	2	Insanity	..
4	4	33	8	5	6	9	11	17	2	7	8	377	218	Bronchitis, Influenza, and Catarrh.....	9
..	..	2	..	..	..	..	..	..	2	1	3	22	24	Pleurisy & Pneumonia.	4
..	2	7	..	2	2	..	..	2	..	2	4	71	41	Skin Disease.....	..
2	..	7	..	..	..	1	1	..	1	4	3	70	53	Dyspepsia	..
7	3	68	2	4	7	6	9	37	7	25	3	747	544	Accidents and diseases not classified.....	26
2	14	142	15	20	24	17	27	65	16	60	32	1673	1153	TOTAL.....	58

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	1	..	1	..	..	1	..	..	3	12
Whooping-cough	..	..	..	1	..	1	..	1	..	..	..	3	20
Scarlatina	..	7	1	1	..	..	..	..	..	1	..	10	6
Diarrhœa	1	2	..	2	..	4	1	..	1	2	..	13	10
Fever	1	..	2	1	..	..	2	1	..	..	2	9	17
Diseases of the Lungs	10	9	1	3	..	4	3	..	6	21	3	60	63
Other causes	9	12	14	7	12	6	13	†17	11	10	9	120	131
TOTAL NO. OF DEATHS.	21	30	18	16	12	16	19	19	19	34	14	218	264
TOTAL NO. OF BIRTHS.	46	33	20	22	21	29	28	20	26	52	19	316	291

* Return from Pendleton District commenced June 28.
† 2 Inquests

Monthly Return of New Cases of Disease coming under Treatment

In 10 *Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.*
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 30th August.	4 Weeks ending 27th September.	4 Weeks ending 25th October.	TOTAL.	DISEASES.	5 Weeks ending 30th August.	4 Weeks ending 27th September.	4 Weeks ending 25th October.	TOTAL.
1	11	1	13	.... Small-pox	13	19	18	50
2	15	10	27	.... Chicken-pox	18	8	2	28
43	51	62	156	..... Measles	32	29	45	106
32	65	69	166	.... Scarlatina	20	26	38	84
3	5	2	10	.... Diphtheria	7	1	6	14
55	43	23	121	.. Whooping-cough ..	59	50	53	162
1	4	1	6	..... Croup	6	9	9	24
1538	1297	664	3499	.....Diarrhœa.. ...	562	464	353	1379
1	3	2	6	.... Dysentery	58	36	46	140
1	..	1	2	..... Cholera	..	..	..	..
24	27	16	67	.... Erysipelas	28	31	27	86
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
14	14	24	52	..... Insanity	34	22	19	75
467	460	532	1459	Bronchitis and Catarrh	742	685	954	2381
6	9	8	23	..... Pleurisy	51	62	67	180
17	15	19	51	.. Pneumonia ..				
5	8	..	13	.... Carbuncle	....	....	..	..
4215	3355	3382	10952	Accidents, and all other Diseases	4262	3402	3851	11515
6426	5382	4816	16624	..... TOTAL	5892	4844	5488	16224

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, NOVEMBER 15, 1862. [No. 120.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·619	29·661	—	29·684	29·661	
Highest (Unreduced)	30·084	30·162	—	30·204	30·139	
Lowest (Unreduced)	29·100	29·090	—	29·140	29·076	
Range	0·984	1·072	—	1·064	1·063	
Temperature.						
Adopted Mean	39·0	36·8	36·2	37·1	36·6	
Range for Week	17·0	23·5	21·0	22·7	24·8	
Daily Range	5·4	10·9	10·0	10·2	9·4	
Maximum in Shade	49·0	48·0	47·0	46·7	47·9	
Minimum in Shade	32 0	24·5	26·0	24·0	23·1	
Maximum in Sun	—	50·5	52·0	52·5	64·4	
Maximum in Sun: Black bulb in Vacuo	—	51·0	—	—	—	
Minimum on Grass	—	21·8	23·5	22·0	21·0	
Temperature in Ground at surface	—	37·73	—	—	—	
Temperature 6 inches below	—	38·50	—	—	—	
Temperature 12 inches below	—	40·45	—	—	—	
Temperature of Evaporation	37·7	35·8	35·4	36·8	35·4	
Temperature of Dew Point	36·0	34·5	32·2	36·4	33·7	
Temperature of Air—Dew Point	3·0	2·3	4·0	0·7	2·9	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·44	2·36	2·30	2·53	2·32	
Required to Saturate do	0·36	0·22	0·22	0·08	0·30	
Weight of a cubic foot of Air	550·5	553·7	554·3	553·6	553·9	
Degree of Humidity (Saturation—1,000)	0·896	0·918	0·930	0·979	0·898	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	2·93	2·75	2·52	2·97	2·67	
Elastic force of Vapour	0·212	0·199	0·182	0·215	0·193	
Clouds (Covered—10 Clear—0)	—	6·3	—	4·3	8·5	
Prevailing Winds	—	SW.SE	S,W	W.SE	S.W	
Rain	—	0·852	1·250	1·028	0·690	
Days on which it fell	—	5	5	6	5	
Ozonometer.						
Moffat (0—10)	—	4·00	1·57	3 21	0·00	
Schonbein (0—10)	—	2·86	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·026	0·019	0·032	0·006	0·024	
Weekly Evaporation	0·182	0·133	0·224	0·042	0·168	

There were 4 barometric oscillations during the week, the amount being 2·323 inches. There were 3 temperature oscillations, the amount being 37·5°.

The mean temperature of the week was 2·8° below the average of the last thirteen years; and 0·9° above the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Bowdon.

The degree of humidity was the highest at Thelwall and the lowest at the Royal Infirmary.

Ozone occurred upon 3 days at Old Trafford, 3 days at Bowdon, 5 days at Thelwall, but was not found during the week at Eccles.

Thunder and lightening occurred upon the 10th, and snow fell on the same day. There was a dense fog on the 12th.

ERRATUM.—In the week ending October 25th, for barometric reading at Eccles, in place of 28·844 ins. read 23·528.

Old Trafford, Manchester,
November 19, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Durin

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	*1	..	..	..	..	1	1	2	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Measles	5	3	1	..	4	2	15	..	..	3	1	..	1	..	1
Scarlatina	..	1	..	3	..	7	11	..	3	1	1	..	6	1	1
Diphtheria	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Whooping-cough	..	2	..	2	..	1	5	..	..	..	1	..	..	5	..
Croup	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Diarrhœa.....	..	8	..	1	3	..	12	3	..	11	1	..	..	7	1
Dysentery	..	1	..	..	..	..	1	..	..	..	..	..	..	..	1
Continued Fever.....	4	5	10	11	..	..	30	6	2	..	1	..	1	1	..
Erysipelas	..	1	1	..	..	..	2	1	..	4	..	..	..	..	..
Rheumatism	6	11	8	7	4	1	37	4	1	29	..	..	1	1	..
Neuralgic Affections	..	..	..	..	..	..	..	2	1	15	..	..	..	..	2
Constitutional Syphilis	..	..	..	..	..	..	..	9	..	37	..	..	..	..	..
Phthisis	..	3	2	2	..	3	10	5	1	24	9	..	3	5	1
Insanity	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	8	65	11	11	46	24	165	22	..	49	..	4	9	16	6
Pleurisy and Pneumonia....	3	1	..	..	..	..	4	..	..	..	..	..	2	..	3
Skin Diseases.....	4	4	..	..	3	..	11	9	..	17	..	..	..	4	1
Dyspepsia	5	4	1	..	2	..	12	5	..	17	..	..	..	1	1
Accidents and diseases not classified.....	33	32	13	14	28	33	153	53	29	421	6	8	11	48	5
TOTAL	68	142	47	51	90	73	471	123	39	628	20	12	34	90	23

* Child 6 months old, not vaccinated.

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) ,, J. BROADBENT,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, C. H. BRADDON,
(8) ,, M. ROWLAND DAY,

(9) (10) Mr. W. J. MALLETT,
(11) ,, W. H HUGHES,
(12) ,, W. WHITEHEAD

NITARY ASSOCIATION.

IS OF MANCHESTER AND ADJOINING DISTRICTS.

ding Saturday, the 15th day of November, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.				
.. 1,329				.... 477.			.. 646. ..		508.	..... 2650.....				Area in Statute Acres.
.. 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448				Population in 1861.
OOR AW DIS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS.										
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
16	17	18	19	20	21	22	23	24	25	26	27				28
..	..	..	..	..	..	..	..	2	..	1	..	7	3	Small-pox	..
..	..	..	..	..	..	..	..	..	..	..	..	1	..	Chicken-pox	..
2	..	..	..	..	..	..	..	4	..	..	..	27	24	Measles	1
..	..	..	..	..	..	..	..	..	1	..	..	25	3	Scarlatina	..
..	..	..	..	..	..	..	..	..	..	..	..	1	6	Diphtheria	..
1	..	1	..	..	..	..	..	..	1	..	2	16	22	Whooping-cough	..
..	..	..	..	..	..	..	1	..	..	..	..	2	..	Croup	2
3	3	2	1	..	3	..	1	..	..	2	..	51	29	Diarrhœa	1
..	..	..	..	..	..	2	..	..	..	..	1	5	6	Dysentery	1
..	..	2	..	1	2	1	..	1	..	2	1	51	55	Continued Fever	3
..	..	..	..	..	..	..	..	..	..	..	..	7	6	Erysipelas	..
4	1	5	4	3	2	..	3	2	3	4	1	105	55	Rheumatism	..
3	..	3	..	1	..	..	..	..	..	2	..	29	8	Neuralgic Affections ..	..
..	..	4	..	..	..	..	..	..	..	2	..	53	25	Constitutional Syphilis	..
2	..	7	..	1	..	1	2	1	1	..	2	75	43	Phthisis	8
..	..	1	..	..	..	..	..	..	..	..	2	6	10	Insanity	..
9	2	42	7	8	5	9	17	24	6	15	10	426	262	Bronchitis, Influenza, and Catarrh.....	11
..	..	4	..	..	..	1	..	3	1	..	4	22	26	Pleurisy & Pneumonia.	2
3	..	4	..	2	..	..	2	2	..	1	7	63	46	Skin Disease.....	1
..	..	10	2	..	4	..	6	2	2	2	3	67	55	Dyspepsia	..
12	5	74	2	6	4	6	9	30	3	32	3	924	509	Accidents and diseases not classified.....	26
39	11	159	16	22	20	20	41	71	18	63	36	1963	1193	TOTAL.....	56

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Small Pox	..	..	..	..	..	..	..	..	1	..	..	1	..
Measles	1	1	..	1	..	..	..	..	2	1	..	6	9
Whooping-cough	1	..	..	1	1	1	..	..	..	..	..	4	26
Scarlatina	1	2	1	..	1	..	..	..	..	..	..	5	2
Diarrhœa	..	2	1	..	2	..	1	1	..	2	..	9	5
Fever	1	..	2	..	..	2	..	..	..	..	†5	10	14
Diseases of the Lungs	10	7	1	6	..	8	4	..	4	16	5	61	75
Other causes	‡16	12	32	4	16	5	‖9	12	12	15	2	135	135
TOTAL NO. OF DEATHS.	30	24	37	12	20	16	⁑14	13	19	34	12	231	266
TOTAL NO. OF BIRTHS.	33	35	21	20	15	25	22	15	22	50	13	271	239

* Return from Pendleton District commenced June 28.
‡ 2 Females, each above 100 years of age.
‖ 2 Inquests
† 2 Typhus and 2 Scarlet Fever.
⁑ 11 are of children under 3 years of age.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

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24	27	16	67	.... Erysipelas	28	31	27	86
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
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WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, NOVEMBER 22, 1862. [No. 121.

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Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	30·146	30·140	—	30·183	30·132	
Highest (Unreduced)	30·366	30·369	—	30·450	30·356	
Lowest (Unreduced)	29·890	29·726	—	29·832	29·726	
Range	0·476	0·643	—	0·618	0·630	
Temperature.						
Adopted Mean	35·8	32·6	32·3	33·1	32·8	
Range for Week	15·0	21·8	21·3	19·2	21·2	
Daily Range	7 3	12·2	12·8	11·6	10·9	
Maximum in Shade	45·0	43·8	43·3	41·7	42·3	
Minimum in Shade	30 0	22·0	22·0	22·5	21·1	
Maximum in Sun	—	44·0	51·5	48·0	61·5	
Maximum in Sun: Black bulb in Vacuo	—	45·3	—	—	—	
Minimum on Grass	—	21·0	22·8	21·0	18·6	
Temperature in Ground at surface	—	33·68	—	—	—	
Temperature 6 inches below	—	34·76	—	—	—	
Temperature 12 inches below	—	37·04	—	—	—	
Temperature of Evaporation	34·1	31·3	31·8	32·4	31·2	
Temperature of Dew Point	32·5	28·6	30·7	31·0	27·9	
Temperature of Air—Dew Point	3·3	4·0	1·6	2·1	4·9	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·07	1·83	2·04	2·08	1·74	
Required to Saturate do	0·41	0·33	0·09	0·13	0·44	
Weight of a cubic foot of Air	545·3	567·8	549·1	549·0	548·5	
Degree of Humidity (Saturation—1,000)	0·846	0·851	0·937	0·920	0·818	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	2·54	1·89	2·38	2·41	2·10	
Elastic force of Vapour	0·184	0·157	0·172	0·174	0·152	
Clouds (Covered—10 Clear—0)	—	7·7	—	4·2	6·7	
Prevailing Winds	—	NE.S	NW.NE	N.E	N.NE	
Rain	—	0·108	0·080	0·080	0·000	
Days on which it fell	—	2	2	2	0	
Ozonometer.						
Moffat (0—10)	—	0·00	0·00	0·00	0·14	
Schonbein (0—10)	—	0·00	0·00	0·00	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·026	0·028	0·010	0·014	0·034	
Weekly Evaporation	0·182	0·196	0·070	0·098	0·238	

There were 5 barometric oscillations during the week, the amount being 0·906 inches. There were 6 temperature oscillations, the amount being 42·2°.

The mean temperature of the week was 6·8° below the average of the last thirteen years; and 3·6° below the corresponding week last year. The past week was colder than any corresponding week since 1851, when the temperature of the corresponding week was only 32·0°.

The mean temperature was the highest at the Royal Infirmary and the lowest at Bowdon.

The degree of humidity was the highest at Bowdon and the lowest at Eccles.

No Ozone was found during the week, excepting a single day at Eccles; at Thelwall the past week was the first in which no Ozone was found since the observations commenced.

Old Trafford, Manchester,
November 25, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Durin

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	..	1	..	1	1	*1	4	..	..	..	..	1	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Measles	4	5	..	3	3	..	15	..	..	..	..	..	..	1	..
Scarlatina	..	2	7	..	..	1	10	..	1	..	2	1	3	..	..
Diphtheria	..	..	..	1	..	..	1	..	..	..	..	..	1	..	..
Whooping-cough	..	2	..	..	..	1	3	..	..	10	1	..	..	6	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Diarrhœa.....	..	10	2	1	8	3	24	..	..	4	..	..	..	4	4
Dysentery	..	..	..	1	..	..	1	..	..	1	..	..	1	..	..
Continued Fever.....	2	1	2	10	3	3	21	14	3	..	2	..	..	8	1
Erysipelas	..	..	..	..	..	..	..	2	..	5	1	2	..	..	..
Rheumatism	3	13	6	8	8	3	41	2	..	20	1	1	2	..	..
Neuralgic Affections	..	..	..	..	..	..	..	1	..	6	..	..	..	..	1
Constitutional Syphilis	1	..	..	..	..	..	1	11	..	20	..	1	..	..	..
Phthisis	..	4	..	1	..	1	6	2	1	26	1	6	1	4	1
Insanity	..	1	..	1	..	..	2	2	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	18	71	34	39	76	2	270	23	1	50	14	6	17	15	4
Pleurisy and Pneumonia....	5	..	..	1	..	..	6	5	..	1	..	2	2	..	3
Skin Diseases.....	..	2	..	2	1	..	5	11	..	15	..	..	..	5	2
Dyspepsia	2	1	1	1	2	..	7	..	..	18	..	..	..	2	3
Accidents and diseases not classified.....	44	33	27	10	20	20	154	25	25	232	18	13	9	49	2
TOTAL	79	146	79	89	122	65	571	98	31	408	40	33	36	97	22

* Not vaccinated.

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) ,, J. BROADBENT,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. C FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, C. H. BRADDON,
(8) ,, M. ROWLAND DAY,

(9) (10) Mr. W. J. MALLETT,
(11) ,, W. H HUGHES,
(12) ,, W. WHITEHEAD

ANITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

nding Saturday, the 22nd day of November, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.					
... 1,329				.... 477.			.. 646. ..		508.	..... 2650.....				Area in Statute Acres.	
... 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448.....				Population in 1861.	
Poor Law Dis.	Public Institutions.			Poor Law Districts.											
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
16	17	18	19	20	21	22	23	24	25	26	27				28
..	..	..	..	..	..	..	1	3	..	..	..	9	..	Small-pox	..
..	..	..	..	..	..	..	..	..	..	..	..	1	..	Chicken-pox	..
..	..	..	..	..	..	1	3	2	..	..	..	22	29	Measles	..
..	..	..	..	3	..	..	..	..	1	..	..	21	1	Scarlatina	..
..	..	..	..	..	..	..	..	..	..	..	..	2	..	Diphtheria	..
1	..	..	..	..	1	2	3	2	..	..	1	31	57	Whooping-cough	..
..	..	..	..	1	..	..	..	..	..	..	..	3	1	Croup	1
2	2	..	2	..	..	1	2	2	..	2	..	53	26	Diarrhœa	2
..	..	1	..	..	..	1	..	..	1	..	..	6	6	Dysentery	..
..	3	4	..	2	1	4	..	1	..	..	2	67	66	Continued Fever	3
..	..	..	..	..	..	..	1	..	..	..	..	11	8	Erysipelas	..
10	1	8	2	..	3	..	2	1	4	3	..	102	47	Rheumatism	..
1	..	2	..	..	1	..	..	1	..	3	3	19	6	Neuralgic Affections ..	..
..	2	3	..	1	..	..	..	..	..	2	1	42	18	Constitutional Syphilis	2
1	1	9	..	1	..	..	..	2	..	4	..	66	62	Phthisis	8
..	1	..	..	..	1	..	..	..	..	..	2	8	4	Insanity	..
32	11	64	8	17	17	21	33	42	9	17	4	677	318	Bronchitis, Influenza, and Catarrh	18
..	..	4	..	..	..	1	..	1	3	1	3	32	21	Pleurisy & Pneumonia.	4
3	1	5	..	..	..	..	4	2	1	2	..	56	37	Skin Disease.....	..
2	..	14	..	2	6	..	3	2	1	3	2	66	57	Dyspepsia	..
27	5	69	3	7	9	11	12	34	12	27	4	748	530	Accidents and diseases not classified.....	27
79	27	183	15	34	39	42	64	95	32	64	12	2042	1294	TOTAL..... ...	65

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

(18) Mr. J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.

(23) Mr. JOSEPH FOSTER
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON.
(27) ,, J.V.L.WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bowei.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	1	..	..	..	..	..	..	..	..	..	..	1	..
Measles	1	1	..	1	..	1	..	..	1	..	..	5	15
Whooping-cough	1	1	..	1	..	1	1	1	..	2	..	8	18
Scarlatina	1	4	1	..	..	1	..	..	1	3	..	11	4
Diarrhœa	1	1	1	1	..	2	1	..	..	2	1	10	16
Fever	1	3	2	..	..	..	..	..	1	..	..	7	19
Diseases of the Lungs	21	18	2	8	..	12	7	..	8	20	4	100	98
Other causes	13	15	33	11	20	12	19	16	10	20	2	171	152
TOTAL NO. OF DEATHS.	40	43	39	22	20	29	28	17	21	†47	7	313	322
TOTAL NO. OF BIRTHS.	43	30	13	15	17	27	32	8	25	60	30	300	291

* Return from Pendleton District commenced June 28. † 23 Cases of people above 21 years of age.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 30th August.	4 Weeks ending 27th September.	4 Weeks ending 25th October.	TOTAL.	DISEASES.	5 Weeks ending 30th August.	4 Weeks ending 27th September.	4 Weeks ending 25th October.	TOTAL.
1	11	1	13	.... Small-pox	13	19	18	50
2	15	10	27	.... Chicken-pox	18	8	2	28
43	51	62	156	..... Measles	32	29	45	106
32	65	69	166	.... Scarlatina	20	26	38	84
3	5	2	10	.... Diphtheria	7	1	6	14
55	43	23	121	.. Whooping-cough ..	59	50	53	162
1	4	1	6	..... Croup	6	9	9	24
1538	1297	664	3499	.....Diarrhœa.. ...	562	464	353	1379
1	3	2	6	.... Dysentery	58	36	46	140
1	..	1	2	..... Cholera	..	..	..	..
24	27	16	67	.... Erysipelas	28	31	27	86
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
14	14	24	52	..... Insanity	34	22	19	75
467	460	552	1479	Bronchitis and Catarrh	742	685	954	2381
6	9	8	23	..... Pleurisy	51	62	67	180
17	15	19	51	.. Pneumonia ..				
5	8	..	13	.... Carbuncle	....	....	..	..
4215	3355	3382	10952	Accidents, and all other Diseases	4262	3402	3851	11515
6426	5382	4836	16644	..... TOTAL	5892	4844	5488	16224

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, NOVEMBER 29, 1862. [No. 122.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, ESQ.	Old Trafford, G. V. VERNON, ESQ.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, ESQ.	Eccles, T. MACKERETH ESQ	Ollerenshaw, A. NEILD, ESQ.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·572	29·597	—	29·624	29·592	
Highest (Unreduced)	29·768	29·796	—	29·840	29·823	
Lowest (Unreduced)	29·326	29·311	—	29·340	29·252	
Range	0·442	0·485	—	0·500	0·571	
Temperature.						
Adopted Mean	36·0	33·2	32·7	32·3	33·7	
Range for Week	16·5	23·5	21·0	25·0	23·9	
Daily Range	9·2	14·0	11·0	11·5	11·8	
Maximum in Shade	45·0	45·3	44·2	44·2	44·9	
Minimum in Shade	28·5	21·8	23·2	19·2	21·0	
Maximum in Sun	—	47·0	48·0	49·3	56·7	
Maximum in Sun: Black bulb in Vacuo	—	49·0	—	—	—	
Minimum on Grass	—	18·8	21·0	17·8	18·0	
Temperature in Ground at surface	—	33·34	—	—	—	
Temperature 6 inches below	—	33·74	—	—	—	
Temperature 12 inches below	—	35·48	—	—	—	
Temperature of Evaporation	34·4	32·0	31·5	31·6	32·0	
Temperature of Dew Point	32·0	29·7	29·1	30·1	29·0	
Temperature of Air—Dew Point	4·0	3·5	3·6	2·2	4·7	
Hygrometrical condition of the Atmosphere	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·08	1·80	1·86	1·94	1·93	
Required to Saturate do	0·42	0·24	0·31	0·19	0·34	
Weight of a cubic foot of Air	553·0	556·8	557·4	558·3	556·2	
Degree of Humidity (Saturation—1,000)	0·856	0·872	0·860	0·910	0·827	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	2·50	2·28	2·21	2·32	2·21	
Elastic force of Vapour	0·181	0·165	0·160	0·168	0·160	
Clouds (Covered—10 Clear—0)	—	7·5	—	3·8	5·8	
Prevailing Winds	—	E.SE	NE.SE	N.E	N.E	
Rain	—	0·195	0·090	0·323	0·144	
Days on which it fell	—	3	1	2	2	
Ozonometer.						
Moffat (0—10)	—	0·57	0·93	1·07	0·00	
Schonbein (0—10)	—	0·43	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·031	0·024	0·026	0·015	0·033	
Weekly Evaporation	0·217	0·168	0·182	0·105	0·231	

There were 5 barometric oscillations during the week, the amount being 1·044 inches. There were 2 temperature oscillations at 8 a.m., the amount being 20·2°.

The mean temperature of the week was 5·0° below the average of the last thirteen years; and 6·8° below the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Thelwall.

The degree of humidity was the highest at Thelwall and the lowest at Eccles.

Ozone occurred upon 1 day at Old Trafford, 2 days at Bowdon and Thelwall, but none was found during the week at Eccles.

There was a very severe frost, for the season, during the early part of the week.

Old Trafford, Manchester,
December 3, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Durin

MANCHESTER.

Area in Statute Acres ..... Manchester Township 1,645 .....
Population in 1861 ..... „ „ 185,050 .....

DISEASES.	Poor Law Districts.							Public Institutions.								
									Royal Infirmary.					Children		
	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14	
Small-pox	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Measles	3	5	..	..	..	1	9	..	..	..	3	..	1	..	2	
Scarlatina	..	..	..	..	2	1	3	..	1	..	..	..	1	..	..	
Diphtheria	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	
Whooping-cough	..	..	..	..	..	2	2	..	..	..	..	..	2	5	2	
Croup	..	..	1	..	..	..	1	..	..	..	..	..	..	..	1	
Diarrhœa	2	6	..	..	3	1	12	1	..	5	..	1	..	6	2	
Dysentery	..	..	..	..	1	..	1	..	..	2	..	..	..	..	1	
Continued Fever	..	1	8	6	1	9	25	8	6	..	2	..	5	3	..	
Erysipelas	..	..	1	..	..	..	1	..	..	8	..	..	..	1	..	
Rheumatism	3	7	5	4	4	..	23	8	..	22	4	2	1	..	..	
Neuralgic Affections	..	..	..	..	..	..	..	..	..	9	..	..	..	..	..	
Constitutional Syphilis	2	1	..	..	..	1	4	15	..	17	..	..	..	..	..	
Phthisis	..	1	..	..	1	2	4	4	1	31	1	2	1	..	2	
Insanity	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	
Bronchitis, Influenza & Catarrh	11	82	30	37	65	28	253	15	1	64	12	6	18	17	4	
Pleurisy and Pneumonia	..	2	1	..	..	2	5	..	..	..	..	..	..	1	2	
Skin Diseases	3	4	..	..	5	2	14	9	1	30	..	1	..	4	5	
Dyspepsia	4	2	..	..	..	1	7	..	..	38	..	..	..	3	2	
Accidents and diseases not classified	51	13	24	13	22	34	157	42	24	185	13	11	11	40	2	
TOTAL	79	124	70	60	104	86	523	105	35	411	35	23	40	80	25	

Medical Officer to whom the Association

(1) Mr. R. M. MANN.
(2) „ J. BROADBENT,
(3) „ JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,

(5) Mr. C. S. BOMPAS,
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(8) „ M. ROWLAND DAY,

(9) (10) Mr. W. J. MALLETT,
(11) „ W. H HUGHES,
(12) „ W. WHITEHEAD

NITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

nding Saturday, the 29th day of November, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.				
... 1,329				.... 477.			.. 646. ..		508.	..... 2650.....				Area in Statute Acres.
... 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448				Population in 1861.
POOR LAW DIS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS										
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.
16	17	18	19	20	21	22	23	24	25	26	27			28
..	..	..	..	..	..	..	..	2	..	2	..	6	1	Small-pox .....
..	..	..	..	..	..	2	..	..	..	..	..	2	..	Chicken-pox .....
..	..	..	..	..	..	1	2	..	2	..	..	20	32	Measles .....
..	..	..	..	..	1	1	..	..	..	..	..	7	1	Scarlatina .....
..	..	..	.	..	..	..	..	..	..	..	..	1	..	Diphtheria .....
..	..	1	..	..	..	3	..	..	.	..	1	16	42	Whooping-cough ....
..	..	..	..	2	..	..	1	..	1	..	..	6	2	Croup .....
4	1	3	2	..	..	1	..	2	..	2	..	48	19	Diarrhœa .....
..	1	..	..	1	..	1	..	..	..	..	..	7	3	Dysentery .....
1	..	6	..	1	..	2	..	..	1	2	3	65	72	Continued Fever ....
1	..	..	..	..	..	..	..	..	..	..	..	11	9	Erysipelas .....
3	..	11	2	1	..	..	2	4	2	4	..	89	53	Rheumatism .....
1	..	5	..	..	..	..	..	1	..	1	..	17	20	Neuralgic Affections ..
2	1	4	..	..	..	..	..	1	..	1	1	46	14	Constitutional Syphilis
1	..	9	1	3	..	1	3	4	..	3	1	72	60	Phthisis .....
..	3	..	..	..	..	..	..	..	..	..	2	8	8	Insanity .....
35	7	58	7	14	13	22	28	26	20	15	7	644	278	Bronchitis, Influenza, and Catarrh .....
..	..	3	..	..	..	3	..	1	3	1	4	23	19	Pleurisy & Pneumonia.
2	1	7	..	..	8	1	1	..	..	1	3	89	33	Skin Disease.....
..	1	13	..	1	3	1	8	4	1	3	2	88	48	Dyspepsia .....
30	11	76	2	3	14	7	13	43	9	26	4	725	503	Accidents and diseases not classified.....
80	26	196	14	26	39	46	58	88	39	61	28	1990	1217	TOTAL..... ...

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

(18) Mr. J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.

(23) Mr. JOSEPH FOSTER
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON.
(27) ,, J.V.L.WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	2	..	..	..	..	..	..	..	..	2	..
Measles	1	1	..	1	..	..	..	..	2	..	1	6	11
Whooping-cough	1	1	1	1	..	4	..	1	1	4	..	14	21
Scarlatina	1	3	1	2	..	..	..	1	..	..	2	8	4
Diarrhœa	..	..	2	..	..	3	..	2	..	1	..	8	11
Fever	3	†1	2	1	..	..	1	2	..	1	**2	15	11
Diseases of the Lungs	19	17	..	‡12	..	12	4	..	‖13	38	5	120	77
Other causes	14	14	41	8	19	¶12	§19	¶14	6	24	9	180	148
TOTAL NO. OF DEATHS.	39	37	49	25	19	31	24	20	22	68	19	353	283
TOTAL NO. OF BIRTHS.	46	38	12	15	15	30	..	22	44	55	14	291	311

* Return from Pendleton District commenced June 28.

† Typhus. ** 1 Typhoid. ‡ 9 Bronchitis; § 12 ditto; and ‖ 11 ditto. ¶ 2 Inquests.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 30th August.	4 Weeks ending 27th September.	4 Weeks ending 25th October.	TOTAL.	DISEASES.	5 Weeks ending 30th August.	4 Weeks ending 27th September.	4 Weeks ending 25th October.	TOTAL.
1	11	1	13	.... Small-pox	13	19	18	50
2	15	10	27	.... Chicken-pox	18	8	2	28
43	51	62	156	..... Measles	32	29	45	106
32	65	69	166	.... Scarlatina	20	26	38	84
3	5	2	10	.... Diphtheria	7	1	6	14
55	43	23	121	.. Whooping-cough ..	59	50	53	162
1	4	1	6	..... Croup	6	9	9	24
1538	1297	664	3499	.....Diarrhœa.. ...	562	464	353	1379
1	3	2	6	.... Dysentery	58	36	46	140
1	..	1	2	..... Cholera	..	..	..	..
24	27	16	67	.... Erysipelas	28	31	27	86
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
14	14	24	52	..... Insanity	34	22	19	75
467	460	552	1479	Bronchitis and Catarrh	742	685	954	2381
6	9	8	23	..... Pleurisy	51	62	67	180
17	15	19	51	... Pneumonia ..				
5	8	..	13	.... Carbuncle	....	....	..	..
4215	3355	3382	10952	Accidents, and all other Diseases	4262	3402	3851	11515
6426	5382	4836	16644	..... TOTAL	5892	4844	5488	16224

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, DECEMBER 6, 1862. [No. 123.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, Esq.	Old Trafford, G. V. VERNON, Esq.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, Esq.	Eccles, T. MACKERETH Esq	Ollerenshaw, A. NEILD, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·604	29·634	—	29·635	29·597	
Highest (Unreduced)	29·813	29·844	—	29·836	29·782	
Lowest (Unreduced)	29·500	29·489	—	29·500	29·427	
Range	0·318	0·355	—	0·336	0·355	
Temperature.						
Adopted Mean	45·8	45·3	43·8	44·1	44·9	
Range for Week	20·0	20·9	17·5	22·7	23·2	
Daily Range	7 6	8·3	5·4	7·6	8·4	
Maximum in Shade	57·0	55·7	50·5	54·5	55·2	
Minimum in Shade	37 0	34·8	33·0	31·8	32·0	
Maximum in Sun	—	55·0	52·0	54·8	56·4	
Maximum in Sun: Black bulb in Vacuo	—	53·9	—	57·0	—	
Minimum on Grass	—	30·0	29·0	26·3	31·5	
Temperature in Ground at surface	—	41·26	—	—	—	
Temperature 6 inches below	—	40·49	—	—	—	
Temperature 12 inches below	—	40·11	—	—	—	
Temperature of Evaporation	44·8	43·6	42·9	42·9	43·1	
Temperature of Dew Point	43·7	41·6	41·8	41·5	41·0	
Temperature of Air—Dew Point	2·1	3·7	2·0	2·6	3·9	
Hygrometrical condition of the Atmosphere	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	3·26	2·99	3·09	2·97	2·94	
Required to Saturate do	0·30	0·47	0·19	0·34	0·45	
Weight of a cubic foot of Air	542·3	543·5	545·2	544·7	543·2	
Degree of Humidity (Saturation—1,000)	0·928	0·874	0·928	0·906	0·865	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	3·94	3·64	3·64	3·61	3·55	
Elastic force of Vapour	0·285	0·263	0·265	0·262	0·257	
Clouds (Covered—10 Clear—0)	—	7·4	—	8 0	8·0	
Prevailing Winds	—	S.E	S.E	E.SE	NE.SE	
Rain	—	0·116	0·230	0·247	0·129	
Days on which it fell	—	3	5	4	3	
Ozonometer.						
Moffat (0—10)	—	0·28	1·93	3·36	0·00	
Schonbein (0—10)	—	0·57	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·023	0·040	0·021	0·027	0·041	
Weekly Evaporation	0·161	0·280	0·147	0·189	0·287	

There were 5 barometric oscillations during the week, the amount being 0·862 inches. There were 2 temperature oscillations, the amount being 23·3°.

The mean temperature of the week was 6·2° above the average of the last thirteen years; 6·8° above the corresponding week last year; and warmer than any corresponding week during the last thirteen years.

The mean temperature was the highest at the Royal Infirmary and the lowest at Bowdon.

The degree of humidity was the highest at the Royal Infirmary and Bowdon, and the lowest at Eccles.

Ozone occurred upon 1 day at Old Trafford, 4 days at Bowdon and 5 days at Thelwall; but none was found during the week at Eccles.

The fall of rain during November has been as follows:—

	Fall in Inches.	Days on which it Fell.
Old Trafford	1·673	14
Bowdon	1·660	13
Thelwall	1·671	13
Eccles	1·574	13

Old Trafford, Manchester, December 9, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Duri

	MANCHESTER.														
Area in Statute Acres	..... Manchester Township 1,645														
Population in 1861	..... ,, ,, 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	..	..	..	1	..	1	..	1	1	..	1	1	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	2	5	3	2	2	1	15	..	..	..	5	..	..	..	..
Scarlatina	..	..	..	..	..	6	6	..	..	1	..	..	1	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	..	1	..	..	..	..	1	..	..	..	..	..	..	2	..
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa.....	..	3	..	3	3	2	11	..	..	12	..	..	..	1	3
Dysentery	..	..	..	1	..	..	1	..	..	1	..	..	..	..	..
Continued Fever.....	3	3	3	9	3	2	23	2	1	..	2	1	1	5	2
Erysipelas	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..
Rheumatism	7	8	5	5	4	..	29	3	..	19	..	1	..	..	..
Neuralgic Affections	..	1	..	..	..	..	1	..	1	21	..	..	1	1	1
Constitutional Syphilis	1	..	..	..	..	..	1	7	..	17	..	..	..	..	..
Phthisis	..	3	1	..	..	1	5	4	..	29	4	..	..	..	..
Insanity	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	5	47	22	33	40	27	174	9	1	64	6	3	1	17	10
Pleurisy and Pneumonia....	1	3	2	..	..	..	6	4	..	1	2	..	..	2	2
Skin Diseases.....	..	4	5	1	4	..	14	7	..	38	..	..	..	2	2
Dyspepsia	2	3	1	..	..	1	7	..	..	38	2	..	1	3	2
Accidents and diseases not classified.....	58	22	14	15	23	23	155	45	33	445	9	8	17	38	6
TOTAL	79	103	56	69	80	63	450	84	37	679	31	14	23	71	28

Medical Officer o whom the Association

(1) Mr. R. M. MANN.
(2) ,, J. BROADBENT,
(3) ,, JOHN ARMSTRONG,
(4) Dr. J. O FLETCHER,

(5) Mr. C. S. BOMPAS,
(6) ,, EVAN THOMAS,
(7) ,, C. H. BRADDON,
(8) ,, M. ROWLAND DAY,

(9) (10) (11) (12) Mr. W. J. MALLETT, ,, W. H HUGHES, ,, W. WHITEHEAD

ANITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

ending Saturday, the 6th day of December, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.				
... 1,329				.... 477.			.. 646. ..		508.	.... 2650.....				Area in Statute Acres.
... 70,967.				.. 68,209 ..			.. 44,850 ..		21739	.....24,448				Population in 1861.
Poor Law Dis.	Public Institutions.			Poor Law Districts										
Greengate.	Workhouse.	Dispensary.	New Bailey	St George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Cholton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.
16	17	18	19	20	21	22	23	24	25	26	27			28
..	..	1	..	1	1	..	..	2	..	..	..	10	..	Small-pox .....
..	..	..	..	..	..	..	..	..	..	..	..	..	1	Chicken-pox .....
..	..	1	..	..	..	..	..	2	4	..	..	27	26	Measles .....
..	..	..	..	2	..	2	..	1	3	..	..	16	3	Scarlatina .....
..	..	..	.	..	..	..	..	..	..	..	..	..	..	Diphtheria .....
..	..	..	..	..	..	..	..	3	.	..	..	6	39	Whooping-cough ....
..	..	..	..	..	..	1	..	..	.	..	..	1	1	Croup .....
2	..	1	2	..	..	..	..	..	2	2	..	37	20	Diarrhœa .....
2	..	..	..	1	..	..	2	2	..	..	..	9	5	Dysentery .....
..	..	3	..	3	..	4	..	..	..	3	..	50	53	Continued Fever ....
..	..	1	..	..	..	..	..	..	1	..	..	4	14	Erysipelas .....
4	1	5	1	2	1	2	4	1	2	3	2	81	52	Rheumatism .....
1	..	4	..	..	..	..	..	..	..	1	1	33	15	Neuralgic Affections ..
..	..	3	..	..	..	..	1	2	2	1	..	34	20	Constitutional Syphilis
2	..	4	..	1	..	2	3	3	1	4	..	63	60	Phthisis .....
..	1	..	..	..	1	..	..	..	..	..	2	7	8	Insanity .....
19	3	60	8	23	11	20	32	19	16	13	8	519	274	Bronchitis, Influenza, and Catarrh .....
..	..	1	..	1	..	2	..	5	..	..	4	30	12	Pleurisy & Pneumonia.
1	2	8	..	3	1	4	..	2	..	1	1	86	55	Skin Disease.....
1	1	10	..	2	7	2	9	3	2	2	1	95	58	Dyspepsia .....
23	7	61	2	4	10	6	6	43	8	24	2	954	524	Accidents and diseases not classified.....
55	15	163	13	43	32	45	57	88	41	54	21	2052	1240	TOTAL.....

DEATHS. 28: 1, .., 3, 1, .., 1, 2, .., 1, .., 1, .., 5, 1, .., 16, 2, .., .., 41, 74

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	1	..	..	..	1	..	..	..	..	2	..
Measles	2	..	..	6	1	..	..	..	3	2	..	14	14
Whooping-cough	..	..	..	1	..	1	2	1	2	..	..	7	22
Scarlatina	2	2	1	..	..	1	..		..	..	..	6	4
Diarrhœa	..	..	..	..	..	1	1	..	..	1	..	3	2
Fever	..	..	3	..	..	1	1	..	..	3	..	8	12
Diseases of the Lungs	13	20	3	10	..	9	5	..	†14	15	..	89	88
Other causes	19	19	26	11	21	‡7	22	‡6	6	16	4	157	141
TOTAL No. OF DEATHS.	36	41	34	28	22	20	⁑32	7	25	37	4	286	283
TOTAL No. OF BIRTHS.	34	38	17	17	28	31	‖35	22	25	56	13	316	295

* Return from Pendleton District commenced June 28.

† 9 Bronchitis. ‡ 1 Inquest. ⁑ 16 under 5 years of age. ‖ 17 Births omitted week ending Nov. 29.

Monthly Return of New Cases of Disease coming under Treatment

In 10 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161 680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

5 weeks ending 30th August.	4 Weeks ending 27th September.	4 Weeks ending 25th October.	TOTAL.	DISEASES.	5 Weeks ending 30th August.	4 Weeks ending 27th September.	4 Weeks ending 25th October.	TOTAL.
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2	15	10	27	.... Chicken-pox ...	18	8	2	28
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32	65	69	166	.... Scarlatina	20	26	38	84
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1	3	2	6	.... Dysentery	58	36	46	140
1	..	1	2	..... Cholera	..	..	..	..
24	27	16	67	.... Erysipelas	28	31	27	86
1	..	..	1	.. Puerperal Fever ..	..	..	..	..
14	14	24	52	..... Insanity ..	34	22	19	75
467	460	552	1479	Bronchitis and Catarrh	742	685	954	2381
6	9	8	23	..... Pleurisy	51	62	67	180
17	15	19	51	... Pneumonia ..				
5	8	..	13	.... Carbuncle	....	....	..	..
4215	3355	3382	10952	Accidents, and all other Diseases	4262	3402	3851	11515
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COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

OL. II.] WEEK ENDING SATURDAY, DECEMBER 13, 1862. [No. 124.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

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Barometer.	INS.	INS.	INS.	INS.	INS.	
Mean @ 32° F.	29·756	29·801	—	29·819	29·790	
Highest (Unreduced)	30·080	30·080	—	30·138	30·096	
Lowest (Unreduced)	29·576	29·542	—	29·610	29·580	
Range	0·504	0·538	—	0·528	0·516	
Temperature.						
Adopted Mean	44·7	42·4	41·1	43·3	43·3	
Range for Week	14·5	19·2	19·7	19·5	17·7	
Daily Range	8·2	10·7	9·7	8·2	9·0	
Maximum in Shade	52·0	51·0	53·7	54·5	50·8	
Minimum in Shade	37·5	31·8	34·0	35·0	33·1	
Maximum in Sun	—	52·8	53·5	51·8	55·7	
Maximum in Sun: Black bulb in Vacuo	—	54·0	—	69·7	—	
Minimum on Grass	—	25·3	29·2	47·5	30·9	
Temperature in Ground at surface	—	41·29	—	—	—	
Temperature 6 inches below	—	41·62	—	—	—	
Temperature 12 inches below	—	42·51	—	—	—	
Temperature of Evaporation	42·8	41·3	40·4	41·9	41·5	
Temperature of Dew Point	40·6	40·0	39·5	40·3	39·4	
Temperature of Air—Dew Point	4·1	2·4	1·6	3·0	3·9	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·39	2·85	2·81	2·85	2·77	
Required to Saturate do	0·48	0·29	0·20	0·38	0·46	
Weight of a cubic foot of Air	546·0	549·7	551·3	549·3	548·8	
Degree of Humidity (Saturation—1,000)	0·862	0·912	0·945	0·891	0·859	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	3·50	3·42	3·34	3·45	3·34	
Elastic force of Vapour	0·253	0·247	0·242	0·250	0·241	
Clouds (Covered—10 Clear—0)	—	8·9	—	7·1	7·9	
Prevailing Winds	—	S.W	W.S,NW	W.SW	SW.NW	
Rain	—	1·886	1·390	1·435	1·526	
Days on which it fell	—	7	7	5	7	
Ozonometer.						
Moffat (0—10)	—	2·43	2·43	4·50	0·43	
Schonbein (0—10)	—	1-14	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·043	0·024	0·016	0·030	0·039	
Weekly Evaporation	0·301	0·168	0·112	0·210	0·273	

NO RETURN.

There were 8 barometric oscillations during the week, the amount being 2·174 inches. There were 4 temperature illations, the amount being 48·7°.

The mean temperature of the week was 1·8° above the average of the last thirteen years, and 3·7° below the rresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Bowdon.

The degree of humidity was the highest at Bowdon, and the lowest at Eccles.

Ozone occurred upon 4 days at Old Trafford, 6 days at Bowdon, 7 days at Thelwall, and 1 day only at Eccles.

A heavy hail shower fell upon the night of the 11th at Old Trafford.

Trafford, Manchester,
December 17, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Dur

MANCHESTER.

Area in Statute Acres ..... Manchester Township 1,645 .....
Population in 1861 ..... „ „ 185,050 .....

DISEASES.	Poor Law Districts. St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Public Institutions. Workhouse. 7	Royal Infirmary. In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	Children St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	..	..	..	*5	..	..	5	..	..	..	..	..	1	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	2	3	..	1	..	1	7	..	..	..	3	..	..	..	3
Scarlatina	..	..	2	..	1	3	6	..	1	..	..	..	2	..	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Whooping-cough	..	..	..	1	..	..	1	..	..	6	..	..	..	2	2
Croup	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
Diarrhœa	..	2	1	3	3	2	11	2	..	1	..	..	..	1	1
Dysentery	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..
Continued Fever	2	3	2	4	1	..	12	9	†1	..	..	..	1	‡6	..
Erysipelas	..	..	1	..	..	..	1	..	..	4	..	..	..	..	..
Rheumatism	7	5	1	6	2	..	21	4	2	20	2	..	3	..	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	6	1	..	..	..	2
Constitutional Syphilis	..	..	..	..	..	..	..	14	..	10	1	..	..	1	..
Phthisis	1	2	..	1	3	1	8	..	..	10	4	2	..	..	3
Insanity	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	3	46	17	17	28	19	130	9	..	36	14	5	3	11	4
Pleurisy and Pneumonia	..	..	..	..	..	..	..	3	1	1	..	..	1	1	2
Skin Diseases	4	5	1	..	5	..	15	8	1	17	..	..	..	5	2
Dyspepsia	2	3	..	..	..	..	5	..	..	15	1	..	..	1	4
Accidents and diseases not classified	43	31	19	21	14	17	145	34	25	296	17	8	6	40	4
TOTAL	64	101	44	59	57	43	368	83	31	424	43	16	17	68	28

* 2 not vaccinated. † 1 Typhus. ‡ 1 Typhoid.

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) „ J. BROADBENT,
(3) „ JOHN ARMSTRONG,
(4) Dr. J. C. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) „ EVAN THOMAS,
(7) „ C. H. BRADDON,
(8) „ M. ROWLAND DAY,
(9) (10) Mr. W. J. MALLETT
(11) „ W. H HUGHES,
(12) „ W. WHITEHEA

ANITARY ASSOCIATION.

NS OF MANCHESTER AND ADJOINING DISTRICTS.

ending Saturday, the 13th day of December, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.					
... 1,329				.... 477.			.. 646. ..		508.	.... 2650.....				Area in Statute Acres.	
.... 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448.....				Population in 1861.	
Poor Law Dis.	Public Institutions.			Poor Law Districts											
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
16	17	18	19	20	21	22	23	24	25	26	27				28
..	..	..	..	..	..	..	1	..	..	..	..	7	1	Small-pox	1
..	..	..	..	..	..	..	..	..	..	..	..	..	2	Chicken-pox	..
..	..	2	..	..	..	..	..	..	4	..	..	19	26	Measles	1
..	..	..	..	..	1	..	..	1	..	1	..	12	4	Scarlatina	2
..	..	..	..	..	..	..	..	..	..	..	..	1	2	Diphtheria	1
..	..	2	..	..	..	..	..	3	..	1	..	17	38	Whooping-cough	..
..	..	..	..	..	..	..	..	..	1	..	3	5	2	Croup	2
5	..	5	2	..	..	..	1	1	2	..	..	33	31	Diarrhœa	..
1	..	..	..	..	..	..	..	..	..	..	..	4	2	Dysentery	..
..	2	2	..	2	..	2	..	..	..	3	..	40	37	Continued Fever	2
..	1	..	..	..	..	..	..	1	..	..	..	7	10	Erysipelas	..
..	..	7	2	1	3	..	4	2	2	3	2	78	63	Rheumatism	..
1	..	3	..	..	..	..	..	..	..	..	1	14	12	Neuralgic Affections ..	..
1	..	6	..	..	..	..	..	2	2	1	1	39	25	Constitutional Syphilis	..
..	..	9	..	1	..	1	3	3	1	3	1	49	69	Phthisis	3
..	3	..	..	..	..	..	..	..	..	..	1	4	12	Insanity	..
13	4	56	6	7	8	13	14	14	9	14	4	375	261	Bronchitis, Influenza, and Catarrh	13
..	..	2	..	2	1	1	..	1	2	1	3	22	20	Pleurisy & Pneumonia.	5
5	1	11	..	2	1	2	2	1	..	..	2	75	47	Skin Disease.....	..
2	..	9	..	..	3	2	3	2	1	3	3	55	79	Dyspepsia	..
18	8	66	3	10	18	7	5	38	7	30	3	790	571	Accidents and diseases not classified.....	19
46	19	180	13	25	35	28	33	69	31	60	24	1646	1314	TOTAL..... ...	49

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

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(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
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(22) Mr. H. M. WILLIAMSON.

(23) Mr. JOSEPH FOSTER
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON.
(27) ,, J.V.L.WESTMACOTT

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	1	..	1	..	..	..	..	..	..	..	..	2	1
Measles	1	2	..	2	2	..	..	..	3	2	1	13	10
Whooping-cough	..	..	..	..	..	1	1	..	2	1	..	5	21
Scarlatina	3	4	2	..	..	..	..	..	..	1	2	12	4
Diarrhœa	..	1	..	..	2	1	..	..	..	..	..	4	13
Fever	2	1	2	..	..	1	..	1	‖2	¶3	..	12	17
Diseases of the Lungs	14	6	1	2	..	6	3	..	6	9	4	51	72
Other causes	14	13	15	8	†13	‡8	§11	13	6	17	6	124	139
TOTAL NO. OF DEATHS.	35	27	21	12	17	17	15	14	19	33	13	223	277
TOTAL NO. OF BIRTHS.	37	33	16	20	25	33	14	12	27	61	15	293	284

* Return from Pendleton District commenced June 28.

† 4 Bronchitis. ‡ 1 Inquest. § 3 Inquests. ‖ 1 Gastric. ¶ 1 Typhus, 1 Typhoid.

Monthly Return of New Cases of Disease coming under Treatment

In 11 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
Population in 1861, 161,680.

At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
Population in 1861, 390,815.

4 Weeks ending 27th September.	4 Weeks ending 25th October.	5 weeks ending 29th Nov	TOTAL.	DISEASES.	4 Weeks ending 27th September.	4 Weeks ending 25th October.	5 Weeks ending 29th Nov.	TOTAL.
11	1	4	16	.... Small-pox	19	18	32	69
15	10	24	49	.... Chicken-pox ...	8	2	5	15
51	62	143	256	..... Measles	29	45	105	179
65	69	42	176	.... Scarlatina	26	38	84	148
5	2	5	12	.... Diphtheria	1	6	5	12
43	23	55	121	.. Whooping-cough ..	50	53	86	189
4	1	2	7	..... Croup	9	9	14	32
1297	664	420	2381	.....Diarrhœa.. ...	464	353	280	1097
3	2	4	9	.... Dysentery	36	46	31	113
..	1	..	1	..... Cholera	..	..	..	..
27	16	28	71	.... Erysipelas	31	27	41	99
..	..	..	..	.. Puerperal Fever ..	..	..	..	..
14	24	21	59	..... Insanity	22	19	27	68
460	552	1095	2107	Bronchitis and Catarrh	685	954	2372	4011
9	8	9	26	..... Pleurisy	62	67	119	248
15	19	33	67	... Pneumonia ..				
8	..	1	9	.... Carbuncle	....	..	....	..
3355	3382	3920	10657	Accidents, and all other Diseases	3402	3851	5232	12485
5382	4836	5806	16024	..... TOTAL	4844	5488	8433	18765

☞ Copies of the "Weekly Return" are regularly forwarded to all Public Institutions from which information is received, also to such public officers as are willing to assist the objects of the compilation. They will also be supplied to the Subscribers upon application to the Secretary, at the Committee Rooms of the Association.

Contributors are requested to forward their communications not later than the Monday in the week following that to which they relate

The Committee would also be glad to receive any other information respecting the Health of the several districts.

COMMITTEE ROOMS,
33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

VOL. II.] WEEK ENDING SATURDAY, DECEMBER 20, 1862. [No. 125.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, Esq.	Old Trafford, G. V. VERNON, Esq.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, Esq.	Eccles, T. MACKERETH Esq.	Ollerenshaw, A. NEILD, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	29·900	29·912	—	29·940	29·909	
Highest (Unreduced)	30·198	30·250	—	30·280	30·220	
Lowest (Unreduced)	29·402	29·398	—	29·424	29·388	
Range	0·796	0·852	—	0·856	0·832	
Temperature.						
Adopted Mean	42·5	41·0	40·7	41·5	41·0	
Range for Week	17·0	20·5	19·2	19·5	22·1	
Daily Range	9 0	11·0	10·8	10·1	10·9	
Maximum in Shade	52·0	52·0	50·6	52·0	51·3	
Minimum in Shade	35 0	31·5	31·4	32·5	29·2	
Maximum in Sun	—	49·2	50·0	51·1	55·6	
Maximum in Sun: Black bulb in Vacuo	—	51·0	—	70·0	—	
Minimum on Grass	—	26·8	28·0	30·0	28·9	
Temperature in Ground at surface	—	39·29	—	—	—	
Temperature 6 inches below	—	39·32	—	—	—	
Temperature 12 inches below	—	40·72	—	—	—	
Temperature of Evaporation	40·3	39·5	39·1	39·5	38·8	
Temperature of Dew Point	37·6	37·6	37·1	37·0	36·0	
Temperature of Air—Dew Point	4·9	3·4	3·6	4·5	5·0	
Hygrometrical condition of the Atmosphere	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·61	2·60	2·56	2·55	2·46	
Required to Saturate do	0·54	0·40	0·41	0·50	0·54	
Weight of a cubic foot of Air	551·7	553·5	553·7	553·5	553·6	
Degree of Humidity (Saturation—1,000)	0·836	0·830	0·872	0·850	0·714	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	3·11	3·11	3·06	3·06	2·93	
Elastic force of Vapour	0·225	0·225	0·221	0·220	0·212	
Clouds (Covered—10 Clear—0)	—	7·9	—	7·4	7·7	
Prevailing Winds	—	W, NW.	NW, SW.	NW, SW, S.	W, SW.	
Rain	—	0·769	0·550	0·693	0·696	
Days on which it fell	—	5	6	4	5	
Ozonometer.						
Moffat (0—10)	—	3·71	2·07	5·78	3·43	
Schonbein (0—10)	—	2·71	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·047	0·032	0·033	0·042	0·045	
Weekly Evaporation	0·329	0·224	0·231	0·294	0·315	

There were 5 barometric oscillations during the week, the amount being 1·765 inches. There were 5 temperature oscillations at 8 a.m., the amount being 31·7°.

The mean temperature of the week was 2·6° above the average of the last thirteen years, and 3·5° below the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Bowdon.

The degree of humidity was the highest at Old Trafford and the lowest at Eccles.

Ozone occurred upon 4 days at Old Trafford, 5 days at Bowdon, 3 days at Eccles, and 7 days at Thelwall.

The last three days of the week were very rough and stormy, accompanied by heavy hail showers, and thunder and lightning.

Old Trafford, Manchester,
December 23, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Duri

	MANCHESTER.														
Area in Statute Acres	Manchester Township 1,645														
Population in 1861	" " 185,050														
	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
DISEASES.	St. Peter's	St. Andrew's	St. George's	Cathedral	St. Jude's	St. Michael's	Total of Districts.	Workhouse.	In-patients.	Out-patients.	District I.	District II.	District III.	St. Mary's Hospital.	Clinical Hospital.
	1	2	3	4	5	6		7	8	9	10	11	12	13	14
Small-pox	2	..	..	..	2	..	4	2	3	1	1	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Measles	..	7	..	5	2	..	14	..	..	..	2	2	1	..	2
Scarlatina	..	..	2	..	4	..	6	..	1	..	..	..	1	1	2
Diphtheria	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Whooping-cough	1	..	..	..	..	1	2	..	..	..	..	..	..	2	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	2	..	3	..	2	7	..	..	12	..	4	..	5	3
Dysentery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Continued Fever	..	3	5	9	..	*2	19	15	2	..	..	1	2	4	..
Erysipelas	1	..	..	..	..	..	1	..	..	3	..	..	..	..	..
Rheumatism	4	16	4	7	2	..	33	1	..	14	..	3	3	1	..
Neuralgic Affections	..	..	..	..	..	..	..	..	..	9	..	1	1	..	1
Constitutional Syphilis	1	..	..	..	..	..	1	8	..	24	..	1	1	..	..
Phthisis	1	2	..	..	..	2	5	1	..	13	2	2	1	2	..
Insanity	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	5	25	24	15	15	20	104	13	..	46	7	4	3	8	2
Pleurisy and Pneumonia	1	..	..	..	..	..	1	4	..	1	..	..	..	1	5
Skin Diseases	1	1	..	..	2	2	6	10	..	18	..	1	..	1	1
Dyspepsia	1	2	..	3	..	..	6	..	..	49	..	4	..	2	4
Accidents and diseases not classified	28	20	13	22	13	30	126	26	30	†240	12	7	14	56	4
TOTAL	46	78	48	64	40	59	335	82	36	431	24	39	27	84	26

* 1 Typhus and 1 Gastric. † 1 Purpura.

Medical Officers to whom the Association

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NITARY ASSOCIATION.

S OF MANCHESTER AND ADJOINING DISTRICTS.

nding Saturday, the 20th day of December, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.				
.. 1,329				.... 477.			.. 646. ..		508.	..... 2650.....				Area in Statute Acres.
.. 70,967.				.. 68,209. ..			.. 44,850 ..		21739	.....24,448.....				Population in 1861.
OOR AW IS. Greengate.	PUBLIC INSTITUTIONS. Workhouse.	Dispensary.	New Bailey	POOR LAW DISTRICTS St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Ancoats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.	DEATHS.
6	17	18	19	20	21	22	23	24	25	26	27				28
..	..	3	..	..	..	..	..	5	..	..	..	19	..	Small-pox	1
..	..	..	..	..	..	..	..	..	..	..	..	1	1	Chicken-pox	1
.	..	..	..	..	..	.	3	3	.	..	..	27	24	Measles	1
..	..	2	..	..	..	..	..	..	1	..	..	14	3	Scarlatina	..
..	..	..	..	..	..	..	..	..	..	..	..	1	1	Diphtheria	..
1	..	..	..	..	..	..	..	..	.	1	1	8	24	Whooping-cough	..
..	..	..	..	..	..	..	..	..	..	..	1	1	2	Croup	1
1	..	2	2	1	1	2	..	..	..	..	1	42	15	Diarrhœa	..
..	..	..	..	1	..	..	..	..	..	..	..	2	5	Dysentery	..
4	..	3	..	1	3	..	‡1	..	..	2	2	61	53	Continued Fever	2
1	..	1	..	..	..	..	..	1	1	..	..	8	13	Erysipelas	..
2	..	3	1	3	1	1	2	2	2	1	..	73	37	Rheumatism	..
3	..	..	..	..	2	..	..	..	..	..	..	17	9	Neuralgic Affections ..	..
..	..	6	..	..	..	..	..	..	..	1	1	43	20	Constitutional Syphilis	..
3	..	3	..	..	..	1	..	..	..	2	..	35	38	Phthisis	5
..	..	..	..	..	..	..	..	..	..	..	1	3	6	Insanity	1
14	1	33	8	2	5	12	16	14	10	11	4	318	258	Bronchitis, Influenza, and Catarrh	11
..	1	5	..	1	1	..	..	3	1	1	2	27	19	Pleurisy & Pneumonia.	2
4	..	4	..	1	..	2	7	..	..	..	..	55	46	Skin Disease.....	..
1	..	12	1	1	2	3	3	4	..	2	..	94	49	Dyspepsia	..
16	2	80	2	6	10	6	7	34	5	31	7	723	545	Accidents and diseases not classified.....	17
50	4	157	14	17	25	27	39	66	20	52	20	1572	1168	TOTAL..... ...	42

‡ Typhus.

is indebted for the annexed Returns.

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Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tushp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	2	..	..	..	..	..	..	..	..	2	..
Measles	5	2	..	6	1	..	..	..	..	..	..	14	9
Whooping-cough	..	..	1	..	..	1	1	..	..	1	..	4	22
Scarlatina	3	..	1	..	..	..	..	..	..	2	..	6	3
Diarrhœa	2	..	..	..	1	1	..	..	..	1	..	5	4
Fever	..	1	1	..	..	1	..	..	..	1	1	5	12
Diseases of the Lungs	6	12	1	7	..	6	2	..	4	14	3	55	49
Other causes	22	13	14	3	14	6	11	8	2	16	13	122	131
TOTAL NO. OF DEATHS.	38	28	20	16	16	15	14	8	6	35	17	213	230
TOTAL NO. OF BIRTHS.	31	32	11	13	20	36	20	22	27	62	11	285	348

* Return from Pendleton District commenced June 28.

Monthly Return of New Cases of Disease coming under Treatment

In 11 Charitable Institutions in St. Marylebone, LONDON. Medical Officer of Health, Dr. R. D. Thomson.
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At Pauper, Charitable, and Public Institutions in MANCHESTER and SALFORD.
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51	62	143	256	..... Measles	29	45	105	179
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43	23	55	121	.. Whooping-cough ..	50	53	86	189
4	1	2	7	..... Croup	9	9	14	32
1297	664	420	2381	.....Diarrhœa.. ...	464	353	280	1097
3	2	4	9	.... Dysentery	36	46	31	113
..	1	..	1	..... Cholera	..	..	..	..
27	16	28	71	.... Erysipelas	31	27	41	99
..	..	..	..	.. Puerperal Fever ..	..	..	..	..
14	24	21	59	..... Insanity ..	22	19	27	68
460	552	1095	2107	Bronchitis and Catarrh	685	954	2372	4011
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15	19	33	67	.. Pneumonia ..				
8	..	1	9	.... Carbuncle	....	..	....	..
3355	3382	3920	10657	Accidents, and all other Diseases	3402	3851	5232	12485
5382	4836	5806	16024	..... TOTAL	4844	5488	8433	18765

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33, PALL MALL, MANCHESTER.

Powlson and Sons, Printers Bow Street, John Dalton Street, Manchester.

HEALTH AND METEOROLOGY OF MANCHESTER

COMMUNICATED TO THE

Manchester and Salford Sanitary Association.

WEEKLY RETURN.

Vol. II.] WEEK ENDING SATURDAY, DECEMBER 27, 1862. [No. 126.

METEOROLOGICAL OBSERVATIONS, TAKEN AT MANCHESTER AND THE NEIGHBOURHOOD.

	Royal Infirmary, M. R. DAY, Esq.	Old Trafford, G. V. VERNON, Esq.	Bowdon, Alderman NEILD.	Thelwall, J. ATKINSON, Esq.	Eccles, T. MACKERETH Esq.	Ollerenshaw, A. NEILD, Esq.
Barometer.	INS.	INS.	INS.	INS.	INS.	NO RETURN.
Mean @ 32° F.	30·041	30·053	—	30·083	30·054	
Highest (Unreduced)	30·244	30·266	—	30·276	30·214	
Lowest (Unreduced)	29·970	29·925	—	29·972	29·920	
Range	0·274	0·341	—	0·304	0·294	
Temperature.						
Adopted Mean	43·7	42·1	41·5	42·7	41·9	
Range for Week	15·0	17·3	15·5	15·5	18·4	
Daily Range	8·9	10·2	8·7	8·4	10·6	
Maximum in Shade	50·0	49·8	48·0	50·0	49·4	
Minimum in Shade	35·0	32·5	32·5	34·5	31·0	
Maximum in Sun	—	50·0	55·6	52·7	58·8	
Maximum in Sun: Black bulb in Vacuo	—	53·5	—	73·7	—	
Minimum on Grass	—	26·5	28·0	28·6	28·9	
Temperature in Ground at surface	—	39·92	—	—	—	
Temperature 6 inches below	—	39·50	—	—	—	
Temperature 12 inches below	—	40·33	—	—	—	
Temperature of Evaporation	41·0	40·7	39·9	40·8	39·7	
Temperature of Dew Point	37·9	39·0	37·9	38·6	37·0	
Temperature of Air—Dew Point	5·8	3·1	3·6	4·1	4·9	
Hygrometrical condition of the Atmosphere.	GRS.	GRS.	GRS.	GRS.	GRS.	
Weight of Vapour in a cubic foot of Air	2·63	2·73	2·63	2·69	2·55	
Required to Saturate do	0·64	0·38	0·42	0·48	0·54	
Weight of a cubic foot of Air	552·8	554·8	555·6	554·8	553·3	
Degree of Humidity (Saturation—1,000)	0·791	0·892	0·882	0·857	0·842	
	INS.	INS.	INS.	INS.	INS.	
Water in a vertical column of the Atmosphere	3·15	3·29	3·15	3·24	3·04	
Elastic force of Vapour	0·228	0·238	0·228	0·234	0·220	
Clouds (Covered—10 Clear—0)	—	7·2	—	7·1	7·9	
Prevailing Winds	—	NW.	NW, W.	NW, W.	NW, SW.	
Rain	—	0·380	0·300	0·286	0·324	
Days on which it fell	—	5	2	3	4	
Ozonometer.						
Moffat (0—10)	—	1·43	1·21	5·07	0·85	
Schonbein (0—10)	—	1·43	—	—	—	
	INS.	INS.	INS.	INS.	INS.	
Daily Evaporation	0·057	0·030	0·034	0·040	0·046	
Weekly Evaporation	0·399	0·210	0·238	0·280	0·322	

There were 8 barometric oscillations during the week, the amount being 1·556 inches. There were 5 temperature oscillations at 8 a.m., the amount being 25·9°.

The mean temperature of the week was 3·4° above the average of the last thirteen years, and 9·9° above the corresponding week last year.

The mean temperature was the highest at the Royal Infirmary and the lowest at Bowdon.

The degree of humidity was the highest at Old Trafford and the lowest at the Royal Infirmary.

Ozone occurred upon 2 days at Old Trafford, 3 days at Bowdon, 7 days at Thelwall, and 2 days at Eccles.

ERRATUM.—In the week ending December 20th, at Thelwall, minimum on the grass, in place of 47·5° read 29·7°.

d Trafford, Manchester,
December 30, 1862.

G. V. VERNON, F.R.A.S.

MANCHESTER AND SALF

RETURN FROM PAUPER, CHARITABLE, AND PUBLIC

New Cases of Disease coming under Treatment Dur

MANCHESTER.

Area in Statute Acres ..... Manchester Township 1,645 .....
Population in 1861 ..... „ „ 185,050 .....

DISEASES.	Poor Law Districts.							Public Institutions.							
									Royal Infirmary.					Children	
	St. Peter's 1	St. Andrew's 2	St. George's 3	Cathedral 4	St. Jude's 5	St. Michael's 6	Total of Districts.	Workhouse. 7	In-patients. 8	Out-patients. 9	District I. 10	District II. 11	District III. 12	St. Mary's Hospital. 13	Clinical Hospital. 14
Small-pox	1	..	†3	..	..	..	4	2	1	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Measles	1	1	1	..	2	1	6	..	..	1	..	..	..	1	3
Scarlatina	..	1	2	1	..	..	4	..	..	..	..	..	..	..	3
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping-cough	1	..	..	2	..	..	3	..	..	..	..	..	1	1	1
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Diarrhœa	1	1	..	1	1	..	4	..	..	1	..	..	..	..	6
Dysentery	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Continued Fever	*1	3	3	5	..	3	15	6	‡7	2	..	..	4	1	..
Erysipelas	..	..	1	..	..	..	1	1	..	..	..	..	..	..	..
Rheumatism	4	2	3	3	..	3	15	5	1	8	1	2	2	..	..
Neuralgic Affections	1	..	..	..	..	..	1	..	..	..	..	..	..	1	1
Constitutional Syphilis	..	..	..	..	..	2	2	4	1	..	..	..	..	2	..
Phthisis	..	..	..	1	..	2	3	1	..	7	1	2	1	..	1
Insanity	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Bronchitis, Influenza & Catarrh	2	11	19	10	10	15	67	4	..	44	3	3	..	10	4
Pleurisy and Pneumonia	..	1	..	..	..	..	1	3	1	..	..	1	..	..	1
Skin Diseases	1	1	..	..	..	..	2	7	..	11	..	..	..	6	5
Dyspepsia	1	4	..	..	..	..	5	..	2	6	..	..	..	1	1
Accidents and diseases not classified	26	25	10	18	11	18	108	20	33	182	7	7	5	25	1
TOTAL	40	50	42	42	24	44	242	55	46	262	12	15	13	48	29

* Typhus. † Not vaccinated. ‡ 2 Typhus.

Medical Officers to whom the Association

(1) Mr. R. M. MANN.
(2) „ J. BROADBENT,
(3) „ JOHN ARMSTRONG,
(4) Dr. J. O. FLETCHER,
(5) Mr. C. S. BOMPAS,
(6) „ EVAN THOMAS,
(7) „ C. H. BRADDON,
(8) „ M. ROWLAND DAY,
(9) (10) Mr. W. J. MALLETT,
(11) „ W. H HUGHES,
(12) „ W. WHITEHEA

NITARY ASSOCIATION.

'S OF MANCHESTER AND ADJOINING DISTRICTS.

nding Saturday, the 27th day of December, 1862.

SALFORD.				HULME.			CHORLTON.		ARDWICK	PENDLETON AND PENDLEBURY.				
.. 1,329				.... 477.....			.. 646...		508.	..... 2650.....				Area in Statute Acres.
.. 70,967.				.. 68,209. ..			..44,850..		21739	.....24,448.....				Population in 1861.
OR AW IS.	PUBLIC INSTITUTIONS.			POOR LAW DISTRICTS										
Greengate.	Workhouse.	Dispensary.	New Bailey	St. George's.	Medlock.	St. Philip's	Poor Law District.	Dispensary.	Poor Law District.	Ardwick & Anccats Dispensary.	Chorlton Union Workhouse.	Total.	Corresponding Week last Year.	DISEASES.
6	17	18	19	20	21	22	23	24	25	26	27			28 DEATHS.
..	..	2	..	..	..	..	..	1	..	..	..	10	..	Small-pox 1
..	..	..	..	..	..	..	..	..	..	..	..	1	2	Chicken-pox ....
..	..	..	..	..	..	..	2	..	..	..	..	13	14	Measles 1
..	..	..	..	..	..	..	..	1	..	..	..	8	2	Scarlatina 3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	Diphtheria ....
..	..	2	..	..	3	..	..	1	.	..	1	13	36	Whooping-cough .... ..
..	..	..	..	..	..	..	..	..	..	2	..	3	..	Croup 1
..	..	1	3	1	1	..	1	1	..	..	1	20	18	Diarrhœa ....
..	..	..	..	..	..	..	..	..	..	..	..	1	2	Dysentery ....
..	1	..	..	1	..	1	..	..	2	1	1	42	47	Continued Fever 2
..	1	..	..	..	1	..	..	..	..	..	..	4	3	Erysipelas ....
1	..	8	3	..	..	1	3	1	..	1	1	53	28	Rheumatism ....
1	..	4	..	1	..	..	..	1	..	..	..	10	10	Neuralgic Affections .. ..
..	..	3	..	..	..	..	..	..	..	1	1	14	17	Constitutional Syphilis 2
1	..	6	..	..	..	1	3	..	..	..	1	28	37	Phthisis 8
1	1	..	..	..	..	..	..	..	..	..	..	4	5	Insanity ....
16	1	27	5	5	2	9	8	15	17	8	..	249	212	Bronchitis, Influenza, and Catarrh 7
..	..	3	..	3	..	..	..	..	..	1	3	17	17	Pleurisy & Pneumonia. 3
2	2	5	..	2	..	..	..	..	..	..	..	43	32	Skin Disease..... ..
2	..	7	1	..	3	2	3	4	..	..	3	41	41	Dyspepsia ....
21	4	42	3	6	3	6	8	24	7	16	5	537	461	Accidents and diseases not classified..... 20
45	10	110	15	19	13	20	28	49	26	30	17	1111	984	TOTAL..... ... 48

is indebted for the annexed Returns.

(13) Mr. H. RUNCORN,
(14) Dr. WHITEHEAD,
(15) Mr. W. GOLLAND,
(16) ,, J. TEALE,
(17) ,, T. F. BROWNBILL

(18) Mr. J. O. BRADBURY,
(19) ,, W. B. STOTT,
(20) ,, T. G. RICHMOND,
(21) Dr. ALEX. WILSON,
(22) Mr. H. M. WILLIAMSON.

(23) Mr. JOSEPH FOSTER,
(24) ,, JOHN RAYNER,
(25) ,, J. M. KIRKMAN.
(26) ,, A. F. PENNINGTON.
(27) ,, J. V. L. WESTMACOTT.

Weekly Return of Births and Deaths in Manchester and Salford.

Causes of Death.	Ancoats District, Mr. Royston.	St. George's Dis., Mr. Worthington.	Market-st. Dis., Mr. A. Gardiner.	London-rd. Dis., Dr. Johns.	Deansgate Dis., Mr. Leigh.	Greengate Dis., Mr. Bower.	Regent-rd. Dis., Mr. Tipple.	*Pendleton Dis., Mr. Bowker.	Chorlton-on-M., Mr. Rowley.	Hulme Township, Mr. Sorby.	Ardwick Tnshp., Mr. Hallsworth.	TOTAL.	Corresponding week last year.
Small Pox	..	..	..	..	..	..	..	..	1	..	..	1	..
Measles	1	..	..	2	..	..	..	..	..	..	..	3	7
Whooping-cough	..	2	1	..	..	1	..	..	..	..	..	4	17
Scarlatina	2	3	2	..	..	..	..	..	1	..	1	9	3
Diarrhœa	..	..	..	..	..	..	..	..	..	..	..	..	4
Fever	1	..	3	..	..	..	1	⁇1	1	2	1	10	17
Diseases of the Lungs	15	9	1	2	..	7	5	..	4	10	6	59	57
Other causes	13	6	14	7	†11	4	‡13	‖13	4	22	6	113	153
TOTAL NO. OF DEATHS.	32	20	21	11	11	12	19	14	11	34	14	199	258
TOTAL NO. OF BIRTHS.	35	26	17	13	16	27	27	15	29	64	21	290	266

* Return from Pendleton District commenced June 28.

† 1 Diptheria. ‡ 3 Diptheria, children under five years of age each. ⁇ Typhoid. ‖ 1 Inquest.

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